



Milliman  
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December 2013

Amity School District/4306  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Amity School District/4306

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

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

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

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

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



December 2013  
Amity School District/4306

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Amity School District -- #4306**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Amity School District to:

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

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

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Amity School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(20.09%)	(20.09%)	(20.09%)
<b>Net pension contribution rate</b>	<b>5.05%</b>	<b>0.13%</b>	<b>4.23%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>5.61%</b>	<b>0.61%</b>	<b>4.71%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.47%	0.05%	2.76%
July 1, 2013 to June 30, 2015	3.10%	1.20%	3.93%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Amity School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$5,955,054	\$8,821,244
Allocated pooled OPSRP UAL	250,417	59,822
Side account	8,047,431	7,580,841
Net unfunded pension actuarial accrued liability	(1,841,960)	1,300,225
Combined valuation payroll	3,552,886	3,506,064
Net pension UAL as a percentage of payroll	(52%)	37%
Calculated Side Account Rate Relief	(20.09%)	(18.60%)
Allocated Pooled RHIA UAL	\$74,541	\$90,826

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$7,580,841</b>	<b>\$7,580,841</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(598,784)	(598,784)
5. Side account earnings during 2012		1,066,373	1,066,373
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,047,431</b>	<b>\$8,047,431</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$8,047,431	\$7,580,841
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,047,431</b>	<b>\$7,580,841</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$8,047,431	\$7,580,841
2. Combined valuation payroll	3,552,886	3,506,064
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(20.09%)	(18.60%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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December 2013

Winston-Dillard Schools/3349  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Winston-Dillard Schools/3349

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

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

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

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

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



December 2013  
Winston-Dillard Schools/3349

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

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

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

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Winston-Dillard Schools -- #3349**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Winston-Dillard Schools to:

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

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Winston-Dillard Schools.

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Winston-Dillard Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(23.76%)	(23.76%)	(23.76%)
<b>Net pension contribution rate</b>	<b>1.38%</b>	<b>0.00%</b>	<b>0.56%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>1.94%</b>	<b>0.48%</b>	<b>1.04%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.75%	0.33%	3.04%
July 1, 2013 to June 30, 2015	0.36%	0.00%	1.19%

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

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

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

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Winston-Dillard Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$9,915,695	\$14,970,040
Allocated pooled OPSRP UAL	416,967	101,520
Side account	15,847,124	14,760,298
Net unfunded pension actuarial accrued liability	(5,514,462)	311,262
Combined valuation payroll	5,915,872	5,949,945
Net pension UAL as a percentage of payroll	(93%)	5%
Calculated Side Account Rate Relief	(23.76%)	(21.34%)
Allocated Pooled RHIA UAL	\$124,118	\$154,136

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

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

### Retiree Healthcare

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$14,760,298</b>	<b>\$14,760,298</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,006,446)	(1,006,446)
5. Side account earnings during 2012		2,095,272	2,095,272
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$15,847,124</b>	<b>\$15,847,124</b>

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## Side Account Information

### Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$7,091,235	\$6,609,937
Side Account 2	8,755,889	8,150,361
Side Account 3	0	0
<b>Total</b>	<b>\$15,847,124</b>	<b>\$14,760,298</b>

### Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$15,847,124	\$14,760,298
2. Combined valuation payroll	5,915,872	5,949,945
3. Amortization factor	11.272	11.626
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(23.76%)	(21.34%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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December 2013

Willamina School District #30J/4314  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Willamina School District #30J/4314

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

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

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

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

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



December 2013  
Willamina School District #30J/4314

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Willamina School District #30J -- #4314**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Willamina School District #30J to:

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

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Willamina School District #30J.

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Willamina School District #30J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(4.55%)	(4.55%)	(4.55%)
<b>Net pension contribution rate</b>	<b>20.59%</b>	<b>15.67%</b>	<b>19.77%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>21.15%</b>	<b>16.15%</b>	<b>20.25%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.55%	14.13%	16.84%
July 1, 2013 to June 30, 2015	17.85%	15.95%	18.68%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Willamina School District #30J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$5,783,607	\$9,284,960
Allocated pooled OPSRP UAL	243,208	62,966
Side account	1,768,591	1,651,750
Net unfunded pension actuarial accrued liability	4,258,224	7,696,176
Combined valuation payroll	3,450,598	3,690,371
Net pension UAL as a percentage of payroll	123%	209%
Calculated Side Account Rate Relief	(4.55%)	(3.85%)
Allocated Pooled RHIA UAL	\$72,395	\$95,601

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$1,651,750</b>	<b>\$1,651,750</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(116,357)	(116,357)
5. Side account earnings during 2012		234,199	234,199
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$1,768,591</b>	<b>\$1,768,591</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$1,768,591	\$1,651,750
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$1,768,591</b>	<b>\$1,651,750</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$1,768,591	\$1,651,750
2. Combined valuation payroll	3,450,598	3,690,371
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(4.55%)	(3.85%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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December 2013

Willamette Education Service District/4254  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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



December 2013

Willamette Education Service District/4254

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

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

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

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

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



December 2013  
Willamette Education Service District/4254

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Willamette Education Service District -- #4254

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Willamette Education Service District to:

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

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Willamette Education Service District.

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Willamette Education Service District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(14.69%)	(14.69%)	(14.69%)
<b>Net pension contribution rate</b>	<b>10.45%</b>	<b>5.53%</b>	<b>9.63%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>11.01%</b>	<b>6.01%</b>	<b>10.11%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.31%	8.89%	11.60%
July 1, 2013 to June 30, 2015	10.19%	8.29%	11.02%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Willamette Education Service District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$25,221,779	\$43,327,383
Allocated pooled OPSRP UAL	1,060,606	293,827
Side account	24,928,283	23,047,014
Net unfunded pension actuarial accrued liability	1,354,102	20,574,196
Combined valuation payroll	15,047,741	17,220,766
Net pension UAL as a percentage of payroll	9%	119%
Calculated Side Account Rate Relief	(14.69%)	(11.51%)
Allocated Pooled RHIA UAL	\$315,708	\$446,113

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$23,047,014</b>	<b>\$23,047,014</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(3,000)	(3,000)
4. Amount transferred to employer reserves during 2012		(1,399,000)	(1,399,000)
5. Side account earnings during 2012		3,283,269	3,283,269
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$24,928,283</b>	<b>\$24,928,283</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$17,590,000	\$16,260,632
Side Account 2	4,111,097	3,800,439
Side Account 3	3,227,186	2,985,943
<b>Total</b>	<b>\$24,928,283</b>	<b>\$23,047,014</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$24,928,283	\$23,047,014
2. Combined valuation payroll	15,047,741	17,220,766
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(14.69%)	(11.51%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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December 2013

West Linn School District/3075  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
West Linn School District/3075

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

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

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

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

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



December 2013  
West Linn School District/3075

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

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

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

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**West Linn School District -- #3075**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for West Linn School District to:

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

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

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for West Linn School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.40%)	(8.40%)	(8.40%)
<b>Net pension contribution rate</b>	<b>16.74%</b>	<b>11.82%</b>	<b>15.92%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>17.30%</b>	<b>12.30%</b>	<b>16.40%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.76%	10.34%	13.05%
July 1, 2013 to June 30, 2015	13.62%	11.72%	14.45%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***West Linn School District***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Allocated pooled T1/T2 UAL	\$63,713,284	\$90,730,645
Allocated pooled OPSRP UAL	2,679,220	615,295
Side account	35,980,942	33,869,734
Net unfunded pension actuarial accrued liability	30,411,562	57,476,206
Combined valuation payroll	38,012,425	36,061,518
Net pension UAL as a percentage of payroll	80%	159%
Calculated Side Account Rate Relief	(8.40%)	(8.08%)
Allocated Pooled RHIA UAL	\$797,517	\$934,192

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$33,869,734</b>	<b>\$33,869,734</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(2,668,044)	(2,668,044)
5. Side account earnings during 2012		4,780,252	4,780,252
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$35,980,942</b>	<b>\$35,980,942</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$35,980,942	\$33,869,734
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$35,980,942</b>	<b>\$33,869,734</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$35,980,942	\$33,869,734
2. Combined valuation payroll	38,012,425	36,061,518
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.40%)	(8.08%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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Milliman  
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December 2013

Warrenton-Hammond School District/3195  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013

Warrenton-Hammond School District/3195

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

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

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

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

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



December 2013  
Warrenton-Hammond School District/3195

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

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

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

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Warrenton-Hammond School District -- #3195**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Warrenton-Hammond School District to:

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

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

## Employer Contribution Rates

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

### **Advisory Employer Rates Calculated as of December 31, 2012, for Warrenton-Hammond School District**

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(7.88%)	(7.88%)	(7.88%)
<b>Net pension contribution rate</b>	<b>17.26%</b>	<b>12.34%</b>	<b>16.44%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>17.82%</b>	<b>12.82%</b>	<b>16.92%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.28%	9.86%	12.57%
July 1, 2013 to June 30, 2015	14.31%	12.41%	15.14%

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

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

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

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Warrenton-Hammond School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$7,199,309	\$10,542,983
Allocated pooled OPSRP UAL	302,740	71,498
Side account	3,813,818	3,597,940
Net unfunded pension actuarial accrued liability	3,688,231	7,016,541
Combined valuation payroll	4,295,230	4,190,381
Net pension UAL as a percentage of payroll	86%	167%
Calculated Side Account Rate Relief	(7.88%)	(7.39%)
Allocated Pooled RHIA UAL	\$90,116	\$108,554

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$3,597,940</b>	<b>\$3,597,940</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(291,460)	(291,460)
5. Side account earnings during 2012		508,338	508,338
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$3,813,818</b>	<b>\$3,813,818</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$3,813,818	\$3,597,940
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$3,813,818</b>	<b>\$3,597,940</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$3,813,818	\$3,597,940
2. Combined valuation payroll	4,295,230	4,190,381
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.88%)	(7.39%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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December 2013

Union County School District/3966  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Union County School District/3966

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

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

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

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

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



December 2013  
Union County School District/3966

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

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

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

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Union County School District -- #3966**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Union County School District to:

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

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

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Union County School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.58%)	(10.58%)	(10.58%)
<b>Net pension contribution rate</b>	<b>14.56%</b>	<b>9.64%</b>	<b>13.74%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.12%</b>	<b>10.12%</b>	<b>14.22%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.09%	9.67%	12.38%
July 1, 2013 to June 30, 2015	12.71%	10.81%	13.54%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Union County School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$2,881,653	\$4,583,446
Allocated pooled OPSRP UAL	121,177	31,083
Side account	2,050,003	1,905,032
Net unfunded pension actuarial accrued liability	952,827	2,709,497
Combined valuation payroll	1,719,243	1,821,722
Net pension UAL as a percentage of payroll	55%	149%
Calculated Side Account Rate Relief	(10.58%)	(8.99%)
Allocated Pooled RHIA UAL	\$36,070	\$47,193

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

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

### Retiree Healthcare

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$1,905,032</b>	<b>\$1,905,032</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(124,613)	(124,613)
5. Side account earnings during 2012		270,585	270,585
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,050,003</b>	<b>\$2,050,003</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$2,050,003	\$1,905,032
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,050,003</b>	<b>\$1,905,032</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$2,050,003	\$1,905,032
2. Combined valuation payroll	1,719,243	1,821,722
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.58%)	(8.99%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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December 2013

Umatilla School District #6R/3928  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Umatilla School District #6R/3928

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

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

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

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

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



December 2013  
Umatilla School District #6R/3928

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Umatilla School District #6R -- #3928**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Umatilla School District #6R to:

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

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Umatilla School District #6R.

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Umatilla School District #6R***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(6.13%)	(6.13%)	(6.13%)
<b>Net pension contribution rate</b>	<b>19.01%</b>	<b>14.09%</b>	<b>18.19%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>19.57%</b>	<b>14.57%</b>	<b>18.67%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.96%	12.54%	15.25%
July 1, 2013 to June 30, 2015	16.13%	14.23%	16.96%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Umatilla School District #6R***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$10,139,279	\$15,312,673
Allocated pooled OPSRP UAL	426,369	103,844
Side account	4,181,486	3,941,345
Net unfunded pension actuarial accrued liability	6,384,162	11,475,172
Combined valuation payroll	6,049,266	6,086,127
Net pension UAL as a percentage of payroll	106%	189%
Calculated Side Account Rate Relief	(6.13%)	(5.57%)
Allocated Pooled RHIA UAL	\$126,916	\$157,664

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$3,941,345</b>	<b>\$3,941,345</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(314,109)	(314,109)
5. Side account earnings during 2012		555,250	555,250
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$4,181,486</b>	<b>\$4,181,486</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$4,181,486	\$3,941,345
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$4,181,486</b>	<b>\$3,941,345</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$4,181,486	\$3,941,345
2. Combined valuation payroll	6,049,266	6,086,127
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(6.13%)	(5.57%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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

December 2013

Tillamook Public Schools/3902  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Tillamook Public Schools/3902

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

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

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

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

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



December 2013  
Tillamook Public Schools/3902

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

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

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

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Tillamook Public Schools -- #3902

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Tillamook Public Schools to:

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

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Tillamook Public Schools.

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Tillamook Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(20.04%)	(20.04%)	(20.04%)
<b>Net pension contribution rate</b>	<b>5.10%</b>	<b>0.18%</b>	<b>4.28%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>5.66%</b>	<b>0.66%</b>	<b>4.76%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	3.03%	1.61%	4.32%
July 1, 2013 to June 30, 2015	4.15%	2.25%	4.98%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Tillamook Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$14,762,904	\$23,061,229
Allocated pooled OPSRP UAL	620,798	156,391
Side account	19,891,661	18,703,607
Net unfunded pension actuarial accrued liability	(4,507,959)	4,514,013
Combined valuation payroll	8,807,799	9,165,844
Net pension UAL as a percentage of payroll	(51%)	49%
Calculated Side Account Rate Relief	(20.04%)	(17.55%)
Allocated Pooled RHIA UAL	\$184,791	\$237,446

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$18,703,607</b>	<b>\$18,703,607</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,456,431)	(1,456,431)
5. Side account earnings during 2012		2,645,485	2,645,485
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$19,891,661</b>	<b>\$19,891,661</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$19,891,661	\$18,703,607
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$19,891,661</b>	<b>\$18,703,607</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$19,891,661	\$18,703,607
2. Combined valuation payroll	8,807,799	9,165,844
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(20.04%)	(17.55%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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



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December 2013

Tigard-Tualatin School District #23J/4316  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

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

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

## Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Tigard-Tualatin School District #23J/4316

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

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

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

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

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



December 2013  
Tigard-Tualatin School District #23J/4316

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Tigard-Tualatin School District #23J -- #4316**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Tigard-Tualatin School District #23J to:

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

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Tigard-Tualatin School District #23J.

## Employer Contribution Rates

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

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Tigard-Tualatin School District #23J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(4.05%)	(4.05%)	(4.05%)
<b>Net pension contribution rate</b>	<b>21.09%</b>	<b>16.17%</b>	<b>20.27%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>21.65%</b>	<b>16.65%</b>	<b>20.75%</b>

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

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

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

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

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

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

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

## Pension

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

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.08%	13.66%	16.37%
July 1, 2013 to June 30, 2015	18.00%	16.10%	18.83%

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

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

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

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

### ***Contractually Required Contribution Rate***

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

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# Executive Summary

## Principal Valuation Results

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

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Tigard-Tualatin School District #23J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$95,664,322	\$144,615,043
Allocated pooled OPSRP UAL	4,022,800	980,715
Side account	26,040,948	24,741,474
Net unfunded pension actuarial accrued liability	73,646,174	120,854,284
Combined valuation payroll	57,074,956	57,478,242
Net pension UAL as a percentage of payroll	129%	210%
Calculated Side Account Rate Relief	(4.05%)	(3.70%)
Allocated Pooled RHIA UAL	\$1,197,457	\$1,489,003

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

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

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

### **Retiree Healthcare**

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

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# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$24,741,474</b>	<b>\$24,741,474</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(2,168,026)	(2,168,026)
5. Side account earnings during 2012		3,468,501	3,468,501
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$26,040,948</b>	<b>\$26,040,948</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$26,040,948	\$24,741,474
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$26,040,948</b>	<b>\$24,741,474</b>

## Development of Side Account Rate

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

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$26,040,948	\$24,741,474
2. Combined valuation payroll	57,074,956	57,478,242
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(4.05%)	(3.70%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

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

### Actuarial Methods and Valuation Procedures

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

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

### Economic Assumptions

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

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

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

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

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

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

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

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

- **Contribution Rate Stabilization Method**

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

- **Allocation of Liability for Service Segments**

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

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

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

- **OPSRP Administrative Expenses**

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

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

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

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

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

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

## Brief Summary of Changes in Plan Provisions

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

# Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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December 2013

Three Rivers U J School District/4338  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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

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

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Three Rivers U J School District/4338

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Three Rivers U J School District/4338

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Three Rivers U J School District -- #4338**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Three Rivers U J School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Three Rivers U J School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Three Rivers U J School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.55%)	(9.55%)	(9.55%)
<b>Net pension contribution rate</b>	<b>15.59%</b>	<b>10.67%</b>	<b>14.77%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.15%</b>	<b>11.15%</b>	<b>15.25%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.54%	10.12%	12.83%
July 1, 2013 to June 30, 2015	12.69%	10.79%	13.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Three Rivers U J School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$36,437,870	\$52,610,217
Allocated pooled OPSRP UAL	1,532,256	356,779
Side account	23,405,715	21,893,522
Net unfunded pension actuarial accrued liability	14,564,411	31,073,474
Combined valuation payroll	21,739,451	20,910,292
Net pension UAL as a percentage of payroll	67%	149%
Calculated Side Account Rate Relief	(9.55%)	(9.01%)
Allocated Pooled RHIA UAL	\$456,103	\$541,692

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$21,893,522</b>	<b>\$21,893,522</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,593,143)	(1,593,143)
5. Side account earnings during 2012		3,106,336	3,106,336
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$23,405,715</b>	<b>\$23,405,715</b>

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$23,405,715	\$21,893,522
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$23,405,715</b>	<b>\$21,893,522</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$23,405,715	\$21,893,522
2. Combined valuation payroll	21,739,451	20,910,292
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.55%)	(9.01%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Milliman  
111 SW Fifth Avenue, Suite 3700  
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503 227 0634

December 2013

Sweet Home School District #55/3618  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Sweet Home School District #55/3618

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Sweet Home School District #55/3618

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Sweet Home School District #55 -- #3618**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Sweet Home School District #55 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Sweet Home School District #55.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Sweet Home School District #55***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(19.55%)	(19.55%)	(19.55%)
<b>Net pension contribution rate</b>	<b>5.59%</b>	<b>0.67%</b>	<b>4.77%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>6.15%</b>	<b>1.15%</b>	<b>5.25%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.89%	3.47%	6.18%
July 1, 2013 to June 30, 2015	5.58%	3.68%	6.41%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Sweet Home School District #55**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$15,443,187	\$25,543,101
Allocated pooled OPSRP UAL	649,405	173,222
Side account	20,300,701	19,025,770
Net unfunded pension actuarial accrued liability	(4,208,109)	6,690,553
Combined valuation payroll	9,213,667	10,152,281
Net pension UAL as a percentage of payroll	(46%)	66%
Calculated Side Account Rate Relief	(19.55%)	(16.12%)
Allocated Pooled RHIA UAL	\$193,307	\$263,000

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$19,025,770</b>	<b>\$19,025,770</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,422,830)	(1,422,830)
5. Side account earnings during 2012		2,699,761	2,699,761
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$20,300,701</b>	<b>\$20,300,701</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$9,513,202	\$8,918,578
Side Account 2	10,787,499	10,107,192
Side Account 3	0	0
<b>Total</b>	<b>\$20,300,701</b>	<b>\$19,025,770</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$20,300,701	\$19,025,770
2. Combined valuation payroll	9,213,667	10,152,281
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(19.55%)	(16.12%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Sutherlin School District #130/3353  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Sutherlin School District #130/3353

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Sutherlin School District #130/3353

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Sutherlin School District #130 -- #3353**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Sutherlin School District #130 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Sutherlin School District #130.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Sutherlin School District #130***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(17.66%)	(17.66%)	(17.66%)
<b>Net pension contribution rate</b>	<b>7.48%</b>	<b>2.56%</b>	<b>6.66%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>8.04%</b>	<b>3.04%</b>	<b>7.14%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.34%	2.92%	5.63%
July 1, 2013 to June 30, 2015	5.48%	3.58%	6.31%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Sutherlin School District #130***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Allocated pooled T1/T2 UAL	\$10,594,523	\$15,790,536
Allocated pooled OPSRP UAL	445,512	107,084
Side account	12,583,048	11,834,983
Net unfunded pension actuarial accrued liability	(1,543,013)	4,062,637
Combined valuation payroll	6,320,872	6,276,057
Net pension UAL as a percentage of payroll	(24%)	65%
Calculated Side Account Rate Relief	(17.66%)	(16.22%)
Allocated Pooled RHIA UAL	\$132,615	\$162,584

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$11,834,983</b>	<b>\$11,834,983</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(921,240)	(921,240)
5. Side account earnings during 2012		1,671,304	1,671,304
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$12,583,048</b>	<b>\$12,583,048</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$5,557,073	\$5,228,240
Side Account 2	7,025,974	6,606,743
Side Account 3	0	0
<b>Total</b>	<b>\$12,583,048</b>	<b>\$11,834,983</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$12,583,048	\$11,834,983
2. Combined valuation payroll	6,320,872	6,276,057
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(17.66%)	(16.22%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

## Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Stanfield School District/3942  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Stanfield School District/3942

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Stanfield School District/3942

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Stanfield School District -- #3942**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Stanfield School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Stanfield School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Stanfield School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(14.37%)	(14.37%)	(14.37%)
<b>Net pension contribution rate</b>	<b>10.77%</b>	<b>5.85%</b>	<b>9.95%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>11.33%</b>	<b>6.33%</b>	<b>10.43%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.42%	6.00%	8.71%
July 1, 2013 to June 30, 2015	9.13%	7.23%	9.96%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Stanfield School District**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$4,110,921	\$6,387,257
Allocated pooled OPSRP UAL	172,869	43,316
Side account	3,973,449	3,711,208
Net unfunded pension actuarial accrued liability	310,341	2,719,365
Combined valuation payroll	2,452,645	2,538,659
Net pension UAL as a percentage of payroll	13%	107%
Calculated Side Account Rate Relief	(14.37%)	(12.57%)
Allocated Pooled RHIA UAL	\$51,458	\$65,765

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$3,711,208</b>	<b>\$3,711,208</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(262,274)	(262,274)
5. Side account earnings during 2012		525,514	525,514
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$3,973,449</b>	<b>\$3,973,449</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$3,973,449	\$3,711,208
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$3,973,449</b>	<b>\$3,711,208</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$3,973,449	\$3,711,208
2. Combined valuation payroll	2,452,645	2,538,659
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(14.37%)	(12.57%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

St Helens School District #502/4279  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
St Helens School District #502/4279

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
St Helens School District #502/4279

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**St Helens School District #502 -- #4279**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for St Helens School District #502 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to St Helens School District #502.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for St Helens School District #502***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(19.72%)	(19.72%)	(19.72%)
<b>Net pension contribution rate</b>	<b>5.42%</b>	<b>0.50%</b>	<b>4.60%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>5.98%</b>	<b>0.98%</b>	<b>5.08%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.47%	3.05%	5.76%
July 1, 2013 to June 30, 2015	5.69%	3.79%	6.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***St Helens School District #502***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$22,108,561	\$36,822,232
Allocated pooled OPSRP UAL	929,692	249,712
Side account	29,326,414	27,237,699
Net unfunded pension actuarial accrued liability	(6,288,161)	9,834,245
Combined valuation payroll	13,190,342	14,635,249
Net pension UAL as a percentage of payroll	(48%)	67%
Calculated Side Account Rate Relief	(19.72%)	(16.01%)
Allocated Pooled RHIA UAL	\$276,739	\$379,133

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$27,237,699</b>	<b>\$27,237,699</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,772,801)	(1,772,801)
5. Side account earnings during 2012		3,863,516	3,863,516
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$29,326,414</b>	<b>\$29,326,414</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$12,255,714	\$11,404,142
Side Account 2	17,070,700	15,833,557
Side Account 3	0	0
<b>Total</b>	<b>\$29,326,414</b>	<b>\$27,237,699</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$29,326,414	\$27,237,699
2. Combined valuation payroll	13,190,342	14,635,249
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(19.72%)	(16.01%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Springfield School District #19/3487  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Springfield School District #19/3487

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Springfield School District #19/3487

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Springfield School District #19 -- #3487**

DECEMBER 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

Milliman has prepared this report for Springfield School District #19 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Springfield School District #19.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Springfield School District #19***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.73%)	(9.73%)	(9.73%)
<b>Net pension contribution rate</b>	<b>15.41%</b>	<b>10.49%</b>	<b>14.59%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.97%</b>	<b>10.97%</b>	<b>15.07%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.82%	9.40%	12.11%
July 1, 2013 to June 30, 2015	13.17%	11.27%	14.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Springfield School District #19**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$80,165,657	\$125,188,334
Allocated pooled OPSRP UAL	3,371,062	848,972
Side account	52,456,706	49,328,713
Net unfunded pension actuarial accrued liability	31,080,013	76,708,593
Combined valuation payroll	47,828,190	49,756,963
Net pension UAL as a percentage of payroll	65%	154%
Calculated Side Account Rate Relief	(9.73%)	(8.53%)
Allocated Pooled RHIA UAL	\$1,003,456	\$1,288,979

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$49,328,713</b>	<b>\$49,328,713</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(3,831,081)	(3,831,081)
5. Side account earnings during 2012		6,960,074	6,960,074
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$52,456,706</b>	<b>\$52,456,706</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$52,456,706	\$49,328,713
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$52,456,706</b>	<b>\$49,328,713</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$52,456,706	\$49,328,713
2. Combined valuation payroll	47,828,190	49,756,963
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.73%)	(8.53%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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111 SW Fifth Avenue, Suite 3700  
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503 227 0634

December 2013

South Umpqua School District/3319  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
South Umpqua School District/3319

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
South Umpqua School District/3319

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**South Umpqua School District -- #3319**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for South Umpqua School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to South Umpqua School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for South Umpqua School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(24.58%)	(24.58%)	(24.58%)
<b>Net pension contribution rate</b>	<b>0.56%</b>	<b>0.00%</b>	<b>0.00%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>1.12%</b>	<b>0.48%</b>	<b>0.48%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.93%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.65%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***South Umpqua School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$9,932,200	\$15,232,823
Allocated pooled OPSRP UAL	417,661	103,302
Side account	16,417,430	15,398,472
Net unfunded pension actuarial accrued liability	(6,067,569)	(62,347)
Combined valuation payroll	5,925,719	6,054,390
Net pension UAL as a percentage of payroll	(102%)	(1%)
Calculated Side Account Rate Relief	(24.58%)	(21.88%)
Allocated Pooled RHIA UAL	\$124,324	\$156,842

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$15,398,472</b>	<b>\$15,398,472</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,156,329)	(1,156,329)
5. Side account earnings during 2012		2,177,287	2,177,287
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$16,417,430</b>	<b>\$16,417,430</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$8,015,187	\$7,531,494
Side Account 2	8,402,244	7,866,978
Side Account 3	0	0
<b>Total</b>	<b>\$16,417,430</b>	<b>\$15,398,472</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$16,417,430	\$15,398,472
2. Combined valuation payroll	5,925,719	6,054,390
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(24.58%)	(21.88%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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December 2013

South Lane School District/3506  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
South Lane School District/3506

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
South Lane School District/3506

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

South Lane School District -- #3506

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for South Lane School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to South Lane School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for South Lane School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(17.34%)	(17.34%)	(17.34%)
<b>Net pension contribution rate</b>	<b>7.80%</b>	<b>2.88%</b>	<b>6.98%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>8.36%</b>	<b>3.36%</b>	<b>7.46%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.81%	3.39%	6.10%
July 1, 2013 to June 30, 2015	5.79%	3.89%	6.62%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***South Lane School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$22,370,353	\$33,297,133
Allocated pooled OPSRP UAL	940,700	225,806
Side account	26,081,816	24,476,793
Net unfunded pension actuarial accrued liability	(2,770,763)	9,046,146
Combined valuation payroll	13,346,532	13,234,174
Net pension UAL as a percentage of payroll	(21%)	68%
Calculated Side Account Rate Relief	(17.34%)	(15.91%)
Allocated Pooled RHIA UAL	\$280,016	\$342,838

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$24,476,793</b>	<b>\$24,476,793</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,855,343)	(1,855,343)
5. Side account earnings during 2012		3,461,366	3,461,366
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$26,081,816</b>	<b>\$26,081,816</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$26,081,816	\$24,476,793
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$26,081,816</b>	<b>\$24,476,793</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$26,081,816	\$24,476,793
2. Combined valuation payroll	13,346,532	13,234,174
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(17.34%)	(15.91%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Siuslaw School District #97J/3537  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Siuslaw School District #97J/3537

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Siuslaw School District #97J/3537

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Siuslaw School District #97J -- #3537**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Siuslaw School District #97J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Siuslaw School District #97J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Siuslaw School District #97J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(12.26%)	(12.26%)	(12.26%)
<b>Net pension contribution rate</b>	<b>12.88%</b>	<b>7.96%</b>	<b>12.06%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>13.44%</b>	<b>8.44%</b>	<b>12.54%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.71%	5.29%	8.00%
July 1, 2013 to June 30, 2015	10.20%	8.30%	11.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Siuslaw School District #97J***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Allocated pooled T1/T2 UAL	\$10,964,761	\$16,210,650
Allocated pooled OPSRP UAL	461,081	109,933
Side account	9,036,891	8,610,945
Net unfunded pension actuarial accrued liability	2,388,951	7,709,638
Combined valuation payroll	6,541,762	6,443,034
Net pension UAL as a percentage of payroll	37%	120%
Calculated Side Account Rate Relief	(12.26%)	(11.50%)
Allocated Pooled RHIA UAL	\$137,249	\$166,910

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$8,610,945</b>	<b>\$8,610,945</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(784,423)	(784,423)
5. Side account earnings during 2012		1,211,369	1,211,369
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$9,036,891</b>	<b>\$9,036,891</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$9,036,891	\$8,610,945
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$9,036,891</b>	<b>\$8,610,945</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$9,036,891	\$8,610,945
2. Combined valuation payroll	6,541,762	6,443,034
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.26%)	(11.50%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

Sisters School District/3296  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Sisters School District/3296

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Sisters School District/3296

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Sisters School District -- #3296**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Sisters School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Sisters School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Sisters School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(15.77%)	(15.77%)	(15.77%)
<b>Net pension contribution rate</b>	<b>9.37%</b>	<b>4.45%</b>	<b>8.55%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>9.93%</b>	<b>4.93%</b>	<b>9.03%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.60%	7.18%	9.89%
July 1, 2013 to June 30, 2015	8.60%	6.70%	9.43%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Sisters School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$8,955,964	\$14,582,214
Allocated pooled OPSRP UAL	376,609	98,890
Side account	9,498,077	8,823,902
Net unfunded pension actuarial accrued liability	(165,504)	5,857,202
Combined valuation payroll	5,343,280	5,795,801
Net pension UAL as a percentage of payroll	(3%)	101%
Calculated Side Account Rate Relief	(15.77%)	(13.10%)
Allocated Pooled RHIA UAL	\$112,104	\$150,143

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$8,823,902</b>	<b>\$8,823,902</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(573,386)	(573,386)
5. Side account earnings during 2012		1,248,562	1,248,562
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$9,498,077</b>	<b>\$9,498,077</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$9,498,077	\$8,823,902
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$9,498,077</b>	<b>\$8,823,902</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$9,498,077	\$8,823,902
2. Combined valuation payroll	5,343,280	5,795,801
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(15.77%)	(13.10%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Silver Falls School District/4270  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Silver Falls School District/4270

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Silver Falls School District/4270

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Silver Falls School District -- #4270

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Silver Falls School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Silver Falls School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Silver Falls School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.88%)	(9.88%)	(9.88%)
<b>Net pension contribution rate</b>	<b>15.26%</b>	<b>10.34%</b>	<b>14.44%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.82%</b>	<b>10.82%</b>	<b>14.92%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.15%	8.73%	11.44%
July 1, 2013 to June 30, 2015	12.63%	10.73%	13.46%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Silver Falls School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$26,108,824	\$39,040,561
Allocated pooled OPSRP UAL	1,097,908	264,756
Side account	17,355,453	16,368,880
Net unfunded pension actuarial accrued liability	9,851,279	22,936,437
Combined valuation payroll	15,576,967	15,516,939
Net pension UAL as a percentage of payroll	63%	148%
Calculated Side Account Rate Relief	(9.88%)	(9.07%)
Allocated Pooled RHIA UAL	\$326,811	\$401,974

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$16,368,880</b>	<b>\$16,368,880</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,330,712)	(1,330,712)
5. Side account earnings during 2012		2,319,284	2,319,284
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$17,355,453</b>	<b>\$17,355,453</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$14,520,354	\$13,693,145
Side Account 2	2,835,099	2,675,735
Side Account 3	0	0
<b>Total</b>	<b>\$17,355,453</b>	<b>\$16,368,880</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$17,355,453	\$16,368,880
2. Combined valuation payroll	15,576,967	15,516,939
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.88%)	(9.07%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Sherwood School District #88J/4317  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Sherwood School District #88J/4317

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Sherwood School District #88J/4317

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Sherwood School District #88J -- #4317**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Sherwood School District #88J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Sherwood School District #88J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Sherwood School District #88J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(4.41%)	(4.41%)	(4.41%)
<b>Net pension contribution rate</b>	<b>20.73%</b>	<b>15.81%</b>	<b>19.91%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>21.29%</b>	<b>16.29%</b>	<b>20.39%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.99%	12.57%	15.28%
July 1, 2013 to June 30, 2015	17.57%	15.67%	18.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Sherwood School District #88J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$37,443,004	\$55,994,708
Allocated pooled OPSRP UAL	1,574,523	379,731
Side account	11,108,566	10,686,309
Net unfunded pension actuarial accrued liability	27,908,961	45,688,130
Combined valuation payroll	22,339,131	22,255,481
Net pension UAL as a percentage of payroll	125%	205%
Calculated Side Account Rate Relief	(4.41%)	(4.13%)
Allocated Pooled RHIA UAL	\$468,684	\$576,539

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$10,686,309</b>	<b>\$10,686,309</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,071,147)	(1,071,147)
5. Side account earnings during 2012		1,495,404	1,495,404
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$11,108,566</b>	<b>\$11,108,566</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$7,347,874	\$7,067,874
Side Account 2	3,760,692	3,618,435
Side Account 3	0	0
<b>Total</b>	<b>\$11,108,566</b>	<b>\$10,686,309</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$11,108,566	\$10,686,309
2. Combined valuation payroll	22,339,131	22,255,481
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(4.41%)	(4.13%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Seaside Schools/3187  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Seaside Schools/3187

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Seaside Schools/3187

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Seaside Schools -- #3187**

DECEMBER 2013

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## Executive Summary

Milliman has prepared this report for Seaside Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Seaside Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Seaside Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.72%)	(8.72%)	(8.72%)
<b>Net pension contribution rate</b>	<b>16.42%</b>	<b>11.50%</b>	<b>15.60%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.98%</b>	<b>11.98%</b>	<b>16.08%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

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# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.34%	9.92%	12.63%
July 1, 2013 to June 30, 2015	13.64%	11.74%	14.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Seaside Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$14,120,485	\$20,992,547
Allocated pooled OPSRP UAL	593,783	142,362
Side account	8,284,739	7,818,762
Net unfunded pension actuarial accrued liability	6,429,529	13,316,147
Combined valuation payroll	8,424,521	8,343,632
Net pension UAL as a percentage of payroll	76%	160%
Calculated Side Account Rate Relief	(8.72%)	(8.06%)
Allocated Pooled RHIA UAL	\$176,750	\$216,146

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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## Side Account Information

### Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$7,818,762</b>	<b>\$7,818,762</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(637,630)	(637,630)
5. Side account earnings during 2012		1,104,608	1,104,608
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,284,739</b>	<b>\$8,284,739</b>

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## Side Account Information

### Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$8,284,739	\$7,818,762
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,284,739</b>	<b>\$7,818,762</b>

### Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$8,284,739	\$7,818,762
2. Combined valuation payroll	8,424,521	8,343,632
3. Amortization factor	11.272	11.626
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(8.72%)	(8.06%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

School Districts/3000  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
School Districts/3000

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
School Districts/3000

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**School Districts -- #3000**

**DECEMBER 2013**

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## Executive Summary

Milliman has prepared this report for School Districts to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to School Districts.

### Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for School Districts***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	0.00%	0.00%	0.00%
<b>Net pension contribution rate</b>	<b>25.14%</b>	<b>20.22%</b>	<b>24.32%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>25.70%</b>	<b>20.70%</b>	<b>24.80%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.89%	17.47%	20.18%
July 1, 2013 to June 30, 2015	21.70%	19.80%	22.53%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***School Districts***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	N/A	N/A
Allocated pooled OPSRP UAL	N/A	N/A
Side account	N/A	N/A
Net unfunded pension actuarial accrued liability	N/A	N/A
Combined valuation payroll	N/A	N/A
Net pension UAL as a percentage of payroll	N/A	N/A
Calculated Side Account Rate Relief	N/A	N/A
Allocated Pooled RHIA UAL	N/A	N/A

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>			

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1		
Side Account 2		
Side Account 3		
<b>Total</b>	<b>\$0</b>	<b>\$0</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$0	\$0
2. Combined valuation payroll	0	0
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	0.00%	0.00%

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Santiam Canyon School District/3665  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Santiam Canyon School District/3665

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Santiam Canyon School District/3665

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Santiam Canyon School District -- #3665**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Santiam Canyon School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Santiam Canyon School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Santiam Canyon School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(14.40%)	(14.40%)	(14.40%)
<b>Net pension contribution rate</b>	<b>10.74%</b>	<b>5.82%</b>	<b>9.92%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>11.30%</b>	<b>6.30%</b>	<b>10.40%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.52%	7.10%	9.81%
July 1, 2013 to June 30, 2015	9.24%	7.34%	10.07%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Santiam Canyon School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$4,541,586	\$7,089,594
Allocated pooled OPSRP UAL	190,979	48,078
Side account	4,398,568	4,081,951
Net unfunded pension actuarial accrued liability	333,997	3,055,721
Combined valuation payroll	2,709,587	2,817,808
Net pension UAL as a percentage of payroll	12%	108%
Calculated Side Account Rate Relief	(14.40%)	(12.46%)
Allocated Pooled RHIA UAL	\$56,848	\$72,997

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$4,081,951</b>	<b>\$4,081,951</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(261,256)	(261,256)
5. Side account earnings during 2012		578,873	578,873
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$4,398,568</b>	<b>\$4,398,568</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$4,398,568	\$4,081,951
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$4,398,568</b>	<b>\$4,081,951</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$4,398,568	\$4,081,951
2. Combined valuation payroll	2,709,587	2,817,808
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(14.40%)	(12.46%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Salem-Keizer Public Schools/3735  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Salem-Keizer Public Schools/3735

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Salem-Keizer Public Schools/3735

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Salem-Keizer Public Schools -- #3735**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Salem-Keizer Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Salem-Keizer Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Salem-Keizer Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.93%)	(8.93%)	(8.93%)
<b>Net pension contribution rate</b>	<b>16.21%</b>	<b>11.29%</b>	<b>15.39%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.77%</b>	<b>11.77%</b>	<b>15.87%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.16%	9.74%	12.45%
July 1, 2013 to June 30, 2015	13.69%	11.79%	14.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Salem-Keizer Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$325,383,291	\$497,686,130
Allocated pooled OPSRP UAL	13,682,759	3,375,087
Side account	195,410,253	184,212,413
Net unfunded pension actuarial accrued liability	143,655,797	316,848,804
Combined valuation payroll	194,129,187	197,808,770
Net pension UAL as a percentage of payroll	74%	160%
Calculated Side Account Rate Relief	(8.93%)	(8.01%)
Allocated Pooled RHIA UAL	\$4,072,913	\$5,124,336

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$184,212,413</b>	<b>\$184,212,413</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(14,788,030)	(14,788,030)
5. Side account earnings during 2012		25,987,870	25,987,870
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$195,410,253</b>	<b>\$195,410,253</b>

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$121,513,910	\$114,555,965
Side Account 2	73,896,343	69,656,448
Side Account 3	0	0
<b>Total</b>	<b>\$195,410,253</b>	<b>\$184,212,413</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$195,410,253	\$184,212,413
2. Combined valuation payroll	194,129,187	197,808,770
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.93%)	(8.01%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

Roseburg Public Schools/3310  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Roseburg Public Schools/3310

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Roseburg Public Schools/3310

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Roseburg Public Schools -- #3310

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Roseburg Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Roseburg Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Roseburg Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(13.03%)	(13.03%)	(13.03%)
<b>Net pension contribution rate</b>	<b>12.11%</b>	<b>7.19%</b>	<b>11.29%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>12.67%</b>	<b>7.67%</b>	<b>11.77%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.68%	7.26%	9.97%
July 1, 2013 to June 30, 2015	10.15%	8.25%	10.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Roseburg Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$41,132,554	\$63,684,510
Allocated pooled OPSRP UAL	1,729,673	431,880
Side account	36,034,575	33,994,124
Net unfunded pension actuarial accrued liability	6,827,652	30,122,266
Combined valuation payroll	24,540,379	25,311,846
Net pension UAL as a percentage of payroll	28%	119%
Calculated Side Account Rate Relief	(13.03%)	(11.55%)
Allocated Pooled RHIA UAL	\$514,868	\$655,716

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$33,994,124</b>	<b>\$33,994,124</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(2,767,642)	(2,767,642)
5. Side account earnings during 2012		4,810,092	4,810,092
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$36,034,575</b>	<b>\$36,034,575</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$23,085,347	\$21,777,653
Side Account 2	12,949,228	12,216,472
Side Account 3	0	0
<b>Total</b>	<b>\$36,034,575</b>	<b>\$33,994,124</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$36,034,575	\$33,994,124
2. Combined valuation payroll	24,540,379	25,311,846
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(13.03%)	(11.55%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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111 SW Fifth Avenue, Suite 3700  
Portland, OR 97204-3654  
503 227 0634

December 2013

Riverdale School/3847  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Riverdale School/3847

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Riverdale School/3847

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott Preppernau".

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Riverdale School -- #3847**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Riverdale School to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Riverdale School.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Riverdale School***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(12.02%)	(12.02%)	(12.02%)
<b>Net pension contribution rate</b>	<b>13.12%</b>	<b>8.20%</b>	<b>12.30%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>13.68%</b>	<b>8.68%</b>	<b>12.78%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.86%	6.44%	9.15%
July 1, 2013 to June 30, 2015	11.17%	9.27%	12.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Riverdale School***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$5,723,227	\$9,071,820
Allocated pooled OPSRP UAL	240,669	61,521
Side account	4,625,494	4,416,107
Net unfunded pension actuarial accrued liability	1,338,402	4,717,234
Combined valuation payroll	3,414,574	3,605,657
Net pension UAL as a percentage of payroll	39%	131%
Calculated Side Account Rate Relief	(12.02%)	(10.53%)
Allocated Pooled RHIA UAL	\$71,639	\$93,406

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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## Side Account Information

### Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$4,416,107</b>	<b>\$4,416,107</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(410,483)	(410,483)
5. Side account earnings during 2012		620,870	620,870
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$4,625,494</b>	<b>\$4,625,494</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$4,625,494	\$4,416,107
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$4,625,494</b>	<b>\$4,416,107</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$4,625,494	\$4,416,107
2. Combined valuation payroll	3,414,574	3,605,657
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.02%)	(10.53%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Reynolds School District/3824  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Reynolds School District/3824

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Reynolds School District/3824

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Reynolds School District -- #3824**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Reynolds School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Reynolds School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Reynolds School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(13.86%)	(13.86%)	(13.86%)
<b>Net pension contribution rate</b>	<b>11.28%</b>	<b>6.36%</b>	<b>10.46%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>11.84%</b>	<b>6.84%</b>	<b>10.94%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.54%	5.12%	7.83%
July 1, 2013 to June 30, 2015	9.12%	7.22%	9.95%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Reynolds School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$96,415,760	\$145,727,627
Allocated pooled OPSRP UAL	4,054,399	988,260
Side account	89,876,933	84,736,389
Net unfunded pension actuarial accrued liability	10,593,226	61,979,498
Combined valuation payroll	57,523,277	57,920,446
Net pension UAL as a percentage of payroll	18%	107%
Calculated Side Account Rate Relief	(13.86%)	(12.58%)
Allocated Pooled RHIA UAL	\$1,206,863	\$1,500,458

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$84,736,389</b>	<b>\$84,736,389</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(6,810,757)	(6,810,757)
5. Side account earnings during 2012		11,952,301	11,952,301
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$89,876,933</b>	<b>\$89,876,933</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$89,876,933	\$84,736,389
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$89,876,933</b>	<b>\$84,736,389</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$89,876,933	\$84,736,389
2. Combined valuation payroll	57,523,277	57,920,446
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(13.86%)	(12.58%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

## Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Reedsport School District/4312  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Reedsport School District/4312

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Reedsport School District/4312

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Reedsport School District -- #4312

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Reedsport School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Reedsport School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Reedsport School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(11.59%)	(11.59%)	(11.59%)
<b>Net pension contribution rate</b>	<b>13.55%</b>	<b>8.63%</b>	<b>12.73%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>14.11%</b>	<b>9.11%</b>	<b>13.21%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.61%	8.19%	10.90%
July 1, 2013 to June 30, 2015	11.22%	9.32%	12.05%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Reedsport School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$4,557,973	\$6,837,829
Allocated pooled OPSRP UAL	191,668	46,371
Side account	3,554,061	3,312,839
Net unfunded pension actuarial accrued liability	1,195,580	3,571,361
Combined valuation payroll	2,719,364	2,717,742
Net pension UAL as a percentage of payroll	44%	131%
Calculated Side Account Rate Relief	(11.59%)	(10.48%)
Allocated Pooled RHIA UAL	\$57,053	\$70,404

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$3,312,839</b>	<b>\$3,312,839</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(227,799)	(227,799)
5. Side account earnings during 2012		470,020	470,020
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$3,554,061</b>	<b>\$3,554,061</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$3,554,061	\$3,312,839
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$3,554,061</b>	<b>\$3,312,839</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$3,554,061	\$3,312,839
2. Combined valuation payroll	2,719,364	2,717,742
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(11.59%)	(10.48%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Redmond School District #2J/4311  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Redmond School District #2J/4311

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Redmond School District #2J/4311

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Redmond School District #2J -- #4311

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Redmond School District #2J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Redmond School District #2J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Redmond School District #2J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.79%)	(8.79%)	(8.79%)
<b>Net pension contribution rate</b>	<b>16.35%</b>	<b>11.43%</b>	<b>15.53%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.91%</b>	<b>11.91%</b>	<b>16.01%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.63%	10.21%	12.92%
July 1, 2013 to June 30, 2015	13.97%	12.07%	14.80%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Redmond School District #2J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$46,082,244	\$71,739,397
Allocated pooled OPSRP UAL	1,937,814	486,505
Side account	27,227,705	25,609,536
Net unfunded pension actuarial accrued liability	20,792,353	46,616,366
Combined valuation payroll	27,493,448	28,513,316
Net pension UAL as a percentage of payroll	76%	163%
Calculated Side Account Rate Relief	(8.79%)	(7.73%)
Allocated Pooled RHIA UAL	\$576,824	\$738,652

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$25,609,536</b>	<b>\$25,609,536</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,999,004)	(1,999,004)
5. Side account earnings during 2012		3,618,173	3,618,173
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$27,227,705</b>	<b>\$27,227,705</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$27,227,705	\$25,609,536
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$27,227,705</b>	<b>\$25,609,536</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$27,227,705	\$25,609,536
2. Combined valuation payroll	27,493,448	28,513,316
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.79%)	(7.73%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Rainier School District #13/4320  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Rainier School District #13/4320

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Rainier School District #13/4320

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Rainier School District #13 -- #4320**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for Rainier School District #13 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Rainier School District #13.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Rainier School District #13***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(12.05%)	(12.05%)	(12.05%)
<b>Net pension contribution rate</b>	<b>13.09%</b>	<b>8.17%</b>	<b>12.27%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>13.65%</b>	<b>8.65%</b>	<b>12.75%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.86%	7.44%	10.15%
July 1, 2013 to June 30, 2015	10.35%	8.45%	11.18%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Rainier School District #13***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$7,444,282	\$10,837,362
Allocated pooled OPSRP UAL	313,041	73,494
Side account	6,033,748	5,684,794
Net unfunded pension actuarial accrued liability	1,723,575	5,226,062
Combined valuation payroll	4,441,385	4,307,384
Net pension UAL as a percentage of payroll	39%	121%
Calculated Side Account Rate Relief	(12.05%)	(11.35%)
Allocated Pooled RHIA UAL	\$93,182	\$111,585

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$5,684,794</b>	<b>\$5,684,794</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(451,331)	(451,331)
5. Side account earnings during 2012		801,285	801,285
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$6,033,748</b>	<b>\$6,033,748</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$6,033,748	\$5,684,794
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$6,033,748</b>	<b>\$5,684,794</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$6,033,748	\$5,684,794
2. Combined valuation payroll	4,441,385	4,307,384
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.05%)	(11.35%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

## Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654  
503 227 0634

December 2013

Portland Public Schools/3818  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Portland Public Schools/3818

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Portland Public Schools/3818

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Portland Public Schools -- #3818**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Portland Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Portland Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Portland Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(21.60%)	(21.60%)	(21.60%)
<b>Net pension contribution rate</b>	<b>3.54%</b>	<b>0.00%</b>	<b>2.72%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>4.10%</b>	<b>0.48%</b>	<b>3.20%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.29%	0.00%	2.58%
July 1, 2013 to June 30, 2015	2.71%	0.81%	3.54%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Portland Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$420,520,631	\$657,130,894
Allocated pooled OPSRP UAL	17,683,399	4,456,371
Side account	610,818,860	576,688,479
Net unfunded pension actuarial accrued liability	(172,614,830)	84,898,786
Combined valuation payroll	250,889,737	261,181,186
Net pension UAL as a percentage of payroll	(69%)	33%
Calculated Side Account Rate Relief	(21.60%)	(18.99%)
Allocated Pooled RHIA UAL	\$5,263,773	\$6,766,030

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$576,688,479</b>	<b>\$576,688,479</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(47,272,658)	(47,272,658)
5. Side account earnings during 2012		81,405,038	81,405,038
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$610,818,860</b>	<b>\$610,818,860</b>

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## Side Account Information

### Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$255,386,220	\$241,425,264
Side Account 2	355,432,640	335,263,215
Side Account 3	0	0
<b>Total</b>	<b>\$610,818,860</b>	<b>\$576,688,479</b>

### Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$610,818,860	\$576,688,479
2. Combined valuation payroll	250,889,737	261,181,186
3. Amortization factor	11.272	11.626
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(21.60%)	(18.99%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

Pilot Rock School District #2R/3958  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Pilot Rock School District #2R/3958

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Pilot Rock School District #2R/3958

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Pilot Rock School District #2R -- #3958**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Pilot Rock School District #2R to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Pilot Rock School District #2R.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Pilot Rock School District #2R***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(13.29%)	(13.29%)	(13.29%)
<b>Net pension contribution rate</b>	<b>11.85%</b>	<b>6.93%</b>	<b>11.03%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>12.41%</b>	<b>7.41%</b>	<b>11.51%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.23%	8.81%	11.52%
July 1, 2013 to June 30, 2015	11.08%	9.18%	11.91%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Pilot Rock School District #2R***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$2,497,544	\$4,218,601
Allocated pooled OPSRP UAL	105,025	28,609
Side account	2,231,863	2,069,381
Net unfunded pension actuarial accrued liability	370,706	2,177,829
Combined valuation payroll	1,490,077	1,676,712
Net pension UAL as a percentage of payroll	25%	130%
Calculated Side Account Rate Relief	(13.29%)	(10.62%)
Allocated Pooled RHIA UAL	\$31,262	\$43,436

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$2,069,381</b>	<b>\$2,069,381</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(130,628)	(130,628)
5. Side account earnings during 2012		294,110	294,110
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,231,863</b>	<b>\$2,231,863</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$2,231,863	\$2,069,381
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,231,863</b>	<b>\$2,069,381</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$2,231,863	\$2,069,381
2. Combined valuation payroll	1,490,077	1,676,712
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(13.29%)	(10.62%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

## Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Philomath School District #17J/3043  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Philomath School District #17J/3043

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Philomath School District #17J/3043

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Philomath School District #17J -- #3043**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Philomath School District #17J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Philomath School District #17J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Philomath School District #17J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.67%)	(9.67%)	(9.67%)
<b>Net pension contribution rate</b>	<b>15.47%</b>	<b>10.55%</b>	<b>14.65%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.03%</b>	<b>11.03%</b>	<b>15.13%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.09%	9.67%	12.38%
July 1, 2013 to June 30, 2015	12.80%	10.90%	13.63%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### *Retiree Healthcare*

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Philomath School District #17J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$10,268,982	\$15,236,511
Allocated pooled OPSRP UAL	431,823	103,327
Side account	6,678,909	6,263,111
Net unfunded pension actuarial accrued liability	4,021,896	9,076,727
Combined valuation payroll	6,126,649	6,055,856
Net pension UAL as a percentage of payroll	66%	150%
Calculated Side Account Rate Relief	(9.67%)	(8.90%)
Allocated Pooled RHIA UAL	\$128,540	\$156,880

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$6,263,111</b>	<b>\$6,263,111</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(471,069)	(471,069)
5. Side account earnings during 2012		887,867	887,867
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$6,678,909</b>	<b>\$6,678,909</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$6,678,909	\$6,263,111
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$6,678,909</b>	<b>\$6,263,111</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$6,678,909	\$6,263,111
2. Combined valuation payroll	6,126,649	6,055,856
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.67%)	(8.90%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Pendleton School District #16R/3931  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Pendleton School District #16R/3931

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Pendleton School District #16R/3931

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Pendleton School District #16R -- #3931**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Pendleton School District #16R to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Pendleton School District #16R.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Pendleton School District #16R***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(20.28%)	(20.28%)	(20.28%)
<b>Net pension contribution rate</b>	<b>4.86%</b>	<b>0.00%</b>	<b>4.04%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>5.42%</b>	<b>0.48%</b>	<b>4.52%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	2.72%	1.30%	4.01%
July 1, 2013 to June 30, 2015	3.48%	1.58%	4.31%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Pendleton School District #16R***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$22,688,951	\$34,280,314
Allocated pooled OPSRP UAL	954,098	232,474
Side account	30,949,967	28,853,761
Net unfunded pension actuarial accrued liability	(7,306,918)	5,659,027
Combined valuation payroll	13,536,613	13,624,946
Net pension UAL as a percentage of payroll	(54%)	42%
Calculated Side Account Rate Relief	(20.28%)	(18.22%)
Allocated Pooled RHIA UAL	\$284,004	\$352,961

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$28,853,761</b>	<b>\$28,853,761</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,990,446)	(1,990,446)
5. Side account earnings during 2012		4,088,652	4,088,652
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$30,949,967</b>	<b>\$30,949,967</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$13,737,866	\$12,810,884
Side Account 2	17,212,101	16,042,877
Side Account 3	0	0
<b>Total</b>	<b>\$30,949,967</b>	<b>\$28,853,761</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$30,949,967	\$28,853,761
2. Combined valuation payroll	13,536,613	13,624,946
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(20.28%)	(18.22%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

Oregon City School District #62/3122  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Oregon City School District #62/3122

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Oregon City School District #62/3122

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Oregon City School District #62 -- #3122**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Oregon City School District #62 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Oregon City School District #62.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Oregon City School District #62***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.40%)	(10.40%)	(10.40%)
<b>Net pension contribution rate</b>	<b>14.74%</b>	<b>9.82%</b>	<b>13.92%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.30%</b>	<b>10.30%</b>	<b>14.40%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.16%	8.74%	11.45%
July 1, 2013 to June 30, 2015	12.33%	10.43%	13.16%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Oregon City School District #62***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$57,087,721	\$86,745,501
Allocated pooled OPSRP UAL	2,400,607	588,270
Side account	39,932,793	37,547,946
Net unfunded pension actuarial accrued liability	19,555,535	49,785,825
Combined valuation payroll	34,059,502	34,477,595
Net pension UAL as a percentage of payroll	57%	144%
Calculated Side Account Rate Relief	(10.40%)	(9.37%)
Allocated Pooled RHIA UAL	\$714,583	\$893,159

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$37,547,946</b>	<b>\$37,547,946</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(2,909,896)	(2,909,896)
5. Side account earnings during 2012		5,295,743	5,295,743
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$39,932,793</b>	<b>\$39,932,793</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$39,932,793	\$37,547,946
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$39,932,793</b>	<b>\$37,547,946</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$39,932,793	\$37,547,946
2. Combined valuation payroll	34,059,502	34,477,595
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.40%)	(9.37%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Ontario School District #8C/3684  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Ontario School District #8C/3684

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Ontario School District #8C/3684

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Ontario School District #8C -- #3684**

DECEMBER 2013

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## Executive Summary

Milliman has prepared this report for Ontario School District #8C to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Ontario School District #8C.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Ontario School District #8C***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.30%)	(8.30%)	(8.30%)
<b>Net pension contribution rate</b>	<b>16.84%</b>	<b>11.92%</b>	<b>16.02%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>17.40%</b>	<b>12.40%</b>	<b>16.50%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.80%	11.38%	14.09%
July 1, 2013 to June 30, 2015	14.57%	12.67%	15.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Ontario School District #8C**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$19,389,918	\$30,744,503
Allocated pooled OPSRP UAL	815,369	208,496
Side account	10,824,639	10,123,868
Net unfunded pension actuarial accrued liability	9,380,648	20,829,131
Combined valuation payroll	11,568,354	12,219,614
Net pension UAL as a percentage of payroll	81%	170%
Calculated Side Account Rate Relief	(8.30%)	(7.13%)
Allocated Pooled RHIA UAL	\$242,709	\$316,555

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$10,123,868</b>	<b>\$10,123,868</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(733,346)	(733,346)
5. Side account earnings during 2012		1,435,117	1,435,117
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$10,824,639</b>	<b>\$10,824,639</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$10,824,639	\$10,123,868
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$10,824,639</b>	<b>\$10,123,868</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$10,824,639	\$10,123,868
2. Combined valuation payroll	11,568,354	12,219,614
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.30%)	(7.13%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Milliman  
111 SW Fifth Avenue, Suite 3700  
Portland, OR 97204-3654  
503 227 0634

December 2013

North Wasco County School District #21/4381  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
North Wasco County School District #21/4381

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
North Wasco County School District #21/4381

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**North Wasco County School District #21 -- #4381**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for North Wasco County School District #21 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to North Wasco County School District #21.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for North Wasco County School District #21***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.67%)	(10.67%)	(10.67%)
<b>Net pension contribution rate</b>	<b>14.47%</b>	<b>9.55%</b>	<b>13.65%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.03%</b>	<b>10.03%</b>	<b>14.13%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.64%	8.22%	10.93%
July 1, 2013 to June 30, 2015	12.32%	10.42%	13.15%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***North Wasco County School District #21***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$22,743,326	\$35,511,416
Allocated pooled OPSRP UAL	956,384	240,823
Side account	16,322,102	15,398,235
Net unfunded pension actuarial accrued liability	7,377,608	20,354,004
Combined valuation payroll	13,569,054	14,114,256
Net pension UAL as a percentage of payroll	54%	144%
Calculated Side Account Rate Relief	(10.67%)	(9.38%)
Allocated Pooled RHIA UAL	\$284,685	\$365,637

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$15,398,235</b>	<b>\$15,398,235</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,246,904)	(1,246,904)
5. Side account earnings during 2012		2,171,771	2,171,771
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$16,322,102</b>	<b>\$16,322,102</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$16,322,102	\$15,398,235
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$16,322,102</b>	<b>\$15,398,235</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$16,322,102	\$15,398,235
2. Combined valuation payroll	13,569,054	14,114,256
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.67%)	(9.38%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

North Santiam School District #29J/4342  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
North Santiam School District #29J/4342

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
North Santiam School District #29J/4342

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**North Santiam School District #29J -- #4342**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for North Santiam School District #29J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to North Santiam School District #29J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for North Santiam School District #29J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(14.04%)	(14.04%)	(14.04%)
<b>Net pension contribution rate</b>	<b>11.10%</b>	<b>6.18%</b>	<b>10.28%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>11.66%</b>	<b>6.66%</b>	<b>10.76%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.36%	4.94%	7.65%
July 1, 2013 to June 30, 2015	7.56%	5.66%	8.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **North Santiam School District #29J**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$18,319,662	\$24,952,051
Allocated pooled OPSRP UAL	770,364	169,214
Side account	17,303,064	16,304,725
Net unfunded pension actuarial accrued liability	1,786,962	8,816,540
Combined valuation payroll	10,929,821	9,917,364
Net pension UAL as a percentage of payroll	16%	89%
Calculated Side Account Rate Relief	(14.04%)	(14.14%)
Allocated Pooled RHIA UAL	\$229,312	\$256,914

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$16,304,725</b>	<b>\$16,304,725</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,308,561)	(1,308,561)
5. Side account earnings during 2012		2,307,900	2,307,900
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$17,303,064</b>	<b>\$17,303,064</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$17,303,064	\$16,304,725
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$17,303,064</b>	<b>\$16,304,725</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$17,303,064	\$16,304,725
2. Combined valuation payroll	10,929,821	9,917,364
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(14.04%)	(14.14%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

North Marion School District #15/3730  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
North Marion School District #15/3730

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
North Marion School District #15/3730

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**North Marion School District #15 -- #3730**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for North Marion School District #15 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to North Marion School District #15.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for North Marion School District #15***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(12.80%)	(12.80%)	(12.80%)
<b>Net pension contribution rate</b>	<b>12.34%</b>	<b>7.42%</b>	<b>11.52%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>12.90%</b>	<b>7.90%</b>	<b>12.00%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.36%	5.94%	8.65%
July 1, 2013 to June 30, 2015	9.64%	7.74%	10.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **North Marion School District #15**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$14,282,157	\$20,854,887
Allocated pooled OPSRP UAL	600,582	141,429
Side account	12,297,684	11,620,593
Net unfunded pension actuarial accrued liability	2,585,055	9,375,723
Combined valuation payroll	8,520,977	8,288,918
Net pension UAL as a percentage of payroll	30%	113%
Calculated Side Account Rate Relief	(12.80%)	(12.06%)
Allocated Pooled RHIA UAL	\$178,774	\$214,729

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$11,620,593</b>	<b>\$11,620,593</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(968,819)	(968,819)
5. Side account earnings during 2012		1,646,910	1,646,910
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$12,297,684</b>	<b>\$12,297,684</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$12,297,684	\$11,620,593
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$12,297,684</b>	<b>\$11,620,593</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$12,297,684	\$11,620,593
2. Combined valuation payroll	8,520,977	8,288,918
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.80%)	(12.06%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

North Clackamas School District #12/4321  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
North Clackamas School District #12/4321

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
North Clackamas School District #12/4321

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**North Clackamas School District #12 -- #4321**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for North Clackamas School District #12 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to North Clackamas School District #12.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for North Clackamas School District #12***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(14.87%)	(14.87%)	(14.87%)
<b>Net pension contribution rate</b>	<b>10.27%</b>	<b>5.35%</b>	<b>9.45%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>10.83%</b>	<b>5.83%</b>	<b>9.93%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.38%	5.96%	8.67%
July 1, 2013 to June 30, 2015	8.09%	6.19%	8.92%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***North Clackamas School District #12***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$124,849,505	\$185,521,794
Allocated pooled OPSRP UAL	5,250,072	1,258,127
Side account	124,840,178	116,635,307
Net unfunded pension actuarial accrued liability	5,259,399	70,144,614
Combined valuation payroll	74,487,331	73,736,911
Net pension UAL as a percentage of payroll	7%	95%
Calculated Side Account Rate Relief	(14.87%)	(13.61%)
Allocated Pooled RHIA UAL	\$1,562,776	\$1,910,192

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$116,635,307</b>	<b>\$116,635,307</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(8,321,529)	(8,321,529)
5. Side account earnings during 2012		16,528,400	16,528,400
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$124,840,178</b>	<b>\$124,840,178</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$55,932,352	\$52,258,465
Side Account 2	68,907,826	64,376,842
Side Account 3	0	0
<b>Total</b>	<b>\$124,840,178</b>	<b>\$116,635,307</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$124,840,178	\$116,635,307
2. Combined valuation payroll	74,487,331	73,736,911
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(14.87%)	(13.61%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

North Bend Public Schools/3245  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
North Bend Public Schools/3245

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
North Bend Public Schools/3245

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**North Bend Public Schools -- #3245**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for North Bend Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to North Bend Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for North Bend Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.74%)	(9.74%)	(9.74%)
<b>Net pension contribution rate</b>	<b>15.40%</b>	<b>10.48%</b>	<b>14.58%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.96%</b>	<b>10.96%</b>	<b>15.06%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

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# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.72%	8.30%	11.01%
July 1, 2013 to June 30, 2015	12.36%	10.46%	13.19%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **North Bend Public Schools**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$14,273,076	\$20,550,877
Allocated pooled OPSRP UAL	600,200	139,367
Side account	9,353,602	8,870,646
Net unfunded pension actuarial accrued liability	5,519,674	11,819,598
Combined valuation payroll	8,515,559	8,168,087
Net pension UAL as a percentage of payroll	65%	145%
Calculated Side Account Rate Relief	(9.74%)	(9.34%)
Allocated Pooled RHIA UAL	\$178,660	\$211,598

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$8,870,646</b>	<b>\$8,870,646</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(765,364)	(765,364)
5. Side account earnings during 2012		1,249,320	1,249,320
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$9,353,602</b>	<b>\$9,353,602</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$9,353,602	\$8,870,646
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$9,353,602</b>	<b>\$8,870,646</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$9,353,602	\$8,870,646
2. Combined valuation payroll	8,515,559	8,168,087
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.74%)	(9.34%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Newberg School District #29Jt/4135  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Newberg School District #29Jt/4135

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Newberg School District #29Jt/4135

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Newberg School District #29Jt -- #4135**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Newberg School District #29Jt to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Newberg School District #29Jt.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Newberg School District #29Jt***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(15.21%)	(15.21%)	(15.21%)
<b>Net pension contribution rate</b>	<b>9.93%</b>	<b>5.01%</b>	<b>9.11%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>10.49%</b>	<b>5.49%</b>	<b>9.59%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.53%	4.11%	6.82%
July 1, 2013 to June 30, 2015	8.02%	6.12%	8.85%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Newberg School District #29Jt***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$38,188,234	\$58,462,948
Allocated pooled OPSRP UAL	1,605,861	396,470
Side account	39,071,356	36,967,272
Net unfunded pension actuarial accrued liability	722,739	21,892,146
Combined valuation payroll	22,783,748	23,236,500
Net pension UAL as a percentage of payroll	3%	94%
Calculated Side Account Rate Relief	(15.21%)	(13.68%)
Allocated Pooled RHIA UAL	\$478,013	\$601,953

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$36,967,272</b>	<b>\$36,967,272</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(3,100,485)	(3,100,485)
5. Side account earnings during 2012		5,205,569	5,205,569
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$39,071,356</b>	<b>\$39,071,356</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$39,071,356	\$36,967,272
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$39,071,356</b>	<b>\$36,967,272</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$39,071,356	\$36,967,272
2. Combined valuation payroll	22,783,748	23,236,500
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(15.21%)	(13.68%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Nestucca Valley School District #101/4336  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Nestucca Valley School District #101/4336

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Nestucca Valley School District #101/4336

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Nestucca Valley School District #101 -- #4336

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Nestucca Valley School District #101 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Nestucca Valley School District #101.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Nestucca Valley School District #101***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(7.52%)	(7.52%)	(7.52%)
<b>Net pension contribution rate</b>	<b>17.62%</b>	<b>12.70%</b>	<b>16.80%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>18.18%</b>	<b>13.18%</b>	<b>17.28%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.98%	11.56%	14.27%
July 1, 2013 to June 30, 2015	15.08%	13.18%	15.91%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Nestucca Valley School District #101***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$4,378,136	\$7,040,057
Allocated pooled OPSRP UAL	184,106	47,743
Side account	2,214,649	2,153,288
Net unfunded pension actuarial accrued liability	2,347,593	4,934,512
Combined valuation payroll	2,612,070	2,798,119
Net pension UAL as a percentage of payroll	90%	176%
Calculated Side Account Rate Relief	(7.52%)	(6.62%)
Allocated Pooled RHIA UAL	\$54,802	\$72,487

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$2,153,288</b>	<b>\$2,153,288</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(234,695)	(234,695)
5. Side account earnings during 2012		297,056	297,056
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,214,649</b>	<b>\$2,214,649</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$2,214,649	\$2,153,288
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,214,649</b>	<b>\$2,153,288</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$2,214,649	\$2,153,288
2. Combined valuation payroll	2,612,070	2,798,119
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.52%)	(6.62%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

## Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

Multnomah Education Service District/4238  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Multnomah Education Service District/4238

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Multnomah Education Service District/4238

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Multnomah Education Service District -- #4238**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Multnomah Education Service District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Multnomah Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Multnomah Education Service District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.58%)	(9.58%)	(9.58%)
<b>Net pension contribution rate</b>	<b>15.56%</b>	<b>10.64%</b>	<b>14.74%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.12%</b>	<b>11.12%</b>	<b>15.22%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.13%	9.71%	12.42%
July 1, 2013 to June 30, 2015	13.26%	11.36%	14.09%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Multnomah Education Service District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$44,970,115	\$69,886,459
Allocated pooled OPSRP UAL	1,891,048	473,939
Side account	28,971,488	27,245,182
Net unfunded pension actuarial accrued liability	17,889,675	43,115,216
Combined valuation payroll	26,829,933	27,776,853
Net pension UAL as a percentage of payroll	67%	155%
Calculated Side Account Rate Relief	(9.58%)	(8.44%)
Allocated Pooled RHIA UAL	\$562,903	\$719,573

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$27,245,182</b>	<b>\$27,245,182</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(2,119,391)	(2,119,391)
5. Side account earnings during 2012		3,846,698	3,846,698
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$28,971,488</b>	<b>\$28,971,488</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$28,971,488	\$27,245,182
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$28,971,488</b>	<b>\$27,245,182</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$28,971,488	\$27,245,182
2. Combined valuation payroll	26,829,933	27,776,853
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.58%)	(8.44%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654  
503 227 0634

December 2013

Morrow County Schools/3809  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Morrow County Schools/3809

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Morrow County Schools/3809

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Morrow County Schools -- #3809

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Morrow County Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Morrow County Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Morrow County Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(7.62%)	(7.62%)	(7.62%)
<b>Net pension contribution rate</b>	<b>17.52%</b>	<b>12.60%</b>	<b>16.70%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>18.08%</b>	<b>13.08%</b>	<b>17.18%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.53%	11.11%	13.82%
July 1, 2013 to June 30, 2015	14.85%	12.95%	15.68%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Morrow County Schools***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Allocated pooled T1/T2 UAL	\$16,216,195	\$24,933,747
Allocated pooled OPSRP UAL	681,911	169,090
Side account	8,312,467	7,893,402
Net unfunded pension actuarial accrued liability	8,585,639	17,209,435
Combined valuation payroll	9,674,857	9,910,089
Net pension UAL as a percentage of payroll	89%	174%
Calculated Side Account Rate Relief	(7.62%)	(6.85%)
Allocated Pooled RHIA UAL	\$202,983	\$256,726

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$7,893,402</b>	<b>\$7,893,402</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(688,066)	(688,066)
5. Side account earnings during 2012		1,108,131	1,108,131
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,312,467</b>	<b>\$8,312,467</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$8,312,467	\$7,893,402
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,312,467</b>	<b>\$7,893,402</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$8,312,467	\$7,893,402
2. Combined valuation payroll	9,674,857	9,910,089
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.62%)	(6.85%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654  
503 227 0634

December 2013

Monroe School District #1J/4340  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Monroe School District #1J/4340

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Monroe School District #1J/4340

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Monroe School District #1J -- #4340**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Monroe School District #1J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Monroe School District #1J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Monroe School District #1J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(7.08%)	(7.08%)	(7.08%)
<b>Net pension contribution rate</b>	<b>18.06%</b>	<b>13.14%</b>	<b>17.24%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>18.62%</b>	<b>13.62%</b>	<b>17.72%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.45%	11.03%	13.74%
July 1, 2013 to June 30, 2015	15.38%	13.48%	16.21%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Monroe School District #1J**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$3,920,935	\$6,042,532
Allocated pooled OPSRP UAL	164,880	40,978
Side account	1,865,796	1,765,439
Net unfunded pension actuarial accrued liability	2,220,019	4,318,071
Combined valuation payroll	2,339,296	2,401,646
Net pension UAL as a percentage of payroll	95%	180%
Calculated Side Account Rate Relief	(7.08%)	(6.32%)
Allocated Pooled RHIA UAL	\$49,079	\$62,216

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$1,765,439</b>	<b>\$1,765,439</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(146,260)	(146,260)
5. Side account earnings during 2012		247,616	247,616
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$1,865,796</b>	<b>\$1,865,796</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$1,865,796	\$1,765,439
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$1,865,796</b>	<b>\$1,765,439</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$1,865,796	\$1,765,439
2. Combined valuation payroll	2,339,296	2,401,646
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.08%)	(6.32%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Molalla River School District/4331  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Molalla River School District/4331

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Molalla River School District/4331

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Molalla River School District -- #4331**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Molalla River School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Molalla River School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Molalla River School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(22.93%)	(22.93%)	(22.93%)
<b>Net pension contribution rate</b>	<b>2.21%</b>	<b>0.00%</b>	<b>1.39%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>2.77%</b>	<b>0.48%</b>	<b>1.87%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.69%
July 1, 2013 to June 30, 2015	0.09%	0.00%	0.92%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Molalla River School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$17,740,725	\$25,653,088
Allocated pooled OPSRP UAL	746,019	173,968
Side account	27,360,165	25,608,219
Net unfunded pension actuarial accrued liability	(8,873,421)	218,837
Combined valuation payroll	10,584,417	10,195,996
Net pension UAL as a percentage of payroll	(84%)	2%
Calculated Side Account Rate Relief	(22.93%)	(21.61%)
Allocated Pooled RHIA UAL	\$222,066	\$264,132

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$25,608,219</b>	<b>\$25,608,219</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,878,891)	(1,878,891)
5. Side account earnings during 2012		3,632,836	3,632,836
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$27,360,165</b>	<b>\$27,360,165</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$11,181,241	\$10,497,893
Side Account 2	16,178,924	15,110,327
Side Account 3	0	0
<b>Total</b>	<b>\$27,360,165</b>	<b>\$25,608,219</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$27,360,165	\$25,608,219
2. Combined valuation payroll	10,584,417	10,195,996
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(22.93%)	(21.61%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Milton-Freewater Unified School District #7/4335  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013

Milton-Freewater Unified School District #7/4335

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Milton-Freewater Unified School District #7/4335

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Milton-Freewater Unified School District #7 -- #4335**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Milton-Freewater Unified School District #7 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Milton-Freewater Unified School District #7.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Milton-Freewater Unified School District #7***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(15.91%)	(15.91%)	(15.91%)
<b>Net pension contribution rate</b>	<b>9.23%</b>	<b>4.31%</b>	<b>8.41%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>9.79%</b>	<b>4.79%</b>	<b>8.89%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.24%	5.82%	8.53%
July 1, 2013 to June 30, 2015	7.87%	5.97%	8.70%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Milton-Freewater Unified School District #7***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$14,074,615	\$21,964,748
Allocated pooled OPSRP UAL	591,855	148,955
Side account	15,061,169	14,041,497
Net unfunded pension actuarial accrued liability	(394,699)	8,072,206
Combined valuation payroll	8,397,154	8,730,040
Net pension UAL as a percentage of payroll	(5%)	92%
Calculated Side Account Rate Relief	(15.91%)	(13.83%)
Allocated Pooled RHIA UAL	\$176,176	\$226,156

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$14,041,497</b>	<b>\$14,041,497</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(976,878)	(976,878)
5. Side account earnings during 2012		1,998,550	1,998,550
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$15,061,169</b>	<b>\$15,061,169</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$6,957,478	\$6,487,154
Side Account 2	8,103,691	7,554,343
Side Account 3	0	0
<b>Total</b>	<b>\$15,061,169</b>	<b>\$14,041,497</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$15,061,169	\$14,041,497
2. Combined valuation payroll	8,397,154	8,730,040
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(15.91%)	(13.83%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Medford School District #549C/4288  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Medford School District #549C/4288

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Medford School District #549C/4288

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Medford School District #549C -- #4288**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Medford School District #549C to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Medford School District #549C.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Medford School District #549C***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(5.02%)	(5.02%)	(5.02%)
<b>Net pension contribution rate</b>	<b>20.12%</b>	<b>15.20%</b>	<b>19.30%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>20.68%</b>	<b>15.68%</b>	<b>19.78%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.71%	13.29%	16.00%
July 1, 2013 to June 30, 2015	17.07%	15.17%	17.90%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Medford School District #549C**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$79,823,513	\$117,561,137
Allocated pooled OPSRP UAL	3,356,675	797,248
Side account	26,962,121	25,171,631
Net unfunded pension actuarial accrued liability	56,218,067	93,186,754
Combined valuation payroll	47,624,061	46,725,481
Net pension UAL as a percentage of payroll	118%	199%
Calculated Side Account Rate Relief	(5.02%)	(4.63%)
Allocated Pooled RHIA UAL	\$999,173	\$1,210,447

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$25,171,631</b>	<b>\$25,171,631</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,784,823)	(1,784,823)
5. Side account earnings during 2012		3,576,313	3,576,313
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$26,962,121</b>	<b>\$26,962,121</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$26,962,121	\$25,171,631
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$26,962,121</b>	<b>\$25,171,631</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$26,962,121	\$25,171,631
2. Combined valuation payroll	47,624,061	46,725,481
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.02%)	(4.63%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

McMinnville Schools/4142  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
McMinnville Schools/4142

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
McMinnville Schools/4142

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL  
McMinnville Schools -- #4142**

DECEMBER 2013

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## Executive Summary

Milliman has prepared this report for McMinnville Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to McMinnville Schools.

### Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for McMinnville Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.11%)	(8.11%)	(8.11%)
<b>Net pension contribution rate</b>	<b>17.03%</b>	<b>12.11%</b>	<b>16.21%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>17.59%</b>	<b>12.59%</b>	<b>16.69%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.53%	10.11%	12.82%
July 1, 2013 to June 30, 2015	14.41%	12.51%	15.24%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **McMinnville Schools**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$51,727,861	\$79,392,789
Allocated pooled OPSRP UAL	2,175,219	538,407
Side account	28,235,495	26,750,058
Net unfunded pension actuarial accrued liability	25,667,585	53,181,138
Combined valuation payroll	30,861,719	31,555,209
Net pension UAL as a percentage of payroll	83%	169%
Calculated Side Account Rate Relief	(8.11%)	(7.29%)
Allocated Pooled RHIA UAL	\$647,492	\$817,454

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$26,750,058</b>	<b>\$26,750,058</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(2,272,400)	(2,272,400)
5. Side account earnings during 2012		3,759,836	3,759,836
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$28,235,495</b>	<b>\$28,235,495</b>

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$16,990,546	\$16,096,223
Side Account 2	11,244,949	10,653,835
Side Account 3	0	0
<b>Total</b>	<b>\$28,235,495</b>	<b>\$26,750,058</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$28,235,495	\$26,750,058
2. Combined valuation payroll	30,861,719	31,555,209
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.11%)	(7.29%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

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Milliman  
111 SW Fifth Avenue, Suite 3700  
Portland, OR 97204-3654  
503 227 0634

December 2013

Madras School District/3447  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Madras School District/3447

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Madras School District/3447

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Madras School District -- #3447**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Madras School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Madras School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Madras School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(7.10%)	(7.10%)	(7.10%)
<b>Net pension contribution rate</b>	<b>18.04%</b>	<b>13.12%</b>	<b>17.22%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>18.60%</b>	<b>13.60%</b>	<b>17.70%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.02%	10.60%	13.31%
July 1, 2013 to June 30, 2015	14.91%	13.01%	15.74%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Madras School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$27,983,119	\$41,006,988
Allocated pooled OPSRP UAL	1,176,724	278,091
Side account	13,362,276	12,863,777
Net unfunded pension actuarial accrued liability	15,797,567	28,421,302
Combined valuation payroll	16,695,203	16,298,509
Net pension UAL as a percentage of payroll	95%	174%
Calculated Side Account Rate Relief	(7.10%)	(6.79%)
Allocated Pooled RHIA UAL	\$350,272	\$422,221

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$12,863,777</b>	<b>\$12,863,777</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,290,918)	(1,290,918)
5. Side account earnings during 2012		1,790,417	1,790,417
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$13,362,276</b>	<b>\$13,362,276</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$13,362,276	\$12,863,777
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$13,362,276</b>	<b>\$12,863,777</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$13,362,276	\$12,863,777
2. Combined valuation payroll	16,695,203	16,298,509
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.10%)	(6.79%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Lincoln County School District/3579  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Lincoln County School District/3579

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Lincoln County School District/3579

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Lincoln County School District -- #3579**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Lincoln County School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Lincoln County School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Lincoln County School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(32.31%)	(32.31%)	(32.31%)
<b>Net pension contribution rate</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Lincoln County School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$30,443,272	\$47,416,755
Allocated pooled OPSRP UAL	1,280,176	321,559
Side account	66,161,015	60,992,329
Net unfunded pension actuarial accrued liability	(34,437,567)	(13,254,015)
Combined valuation payroll	18,162,972	18,846,115
Net pension UAL as a percentage of payroll	(190%)	(70%)
Calculated Side Account Rate Relief	(32.31%)	(27.83%)
Allocated Pooled RHIA UAL	\$381,067	\$488,218

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$60,992,329</b>	<b>\$60,992,329</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(3,533,540)	(3,533,540)
5. Side account earnings during 2012		8,704,225	8,704,225
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$66,161,015</b>	<b>\$66,161,015</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$28,323,116	\$26,103,438
Side Account 2	37,837,899	34,888,891
Side Account 3	0	0
<b>Total</b>	<b>\$66,161,015</b>	<b>\$60,992,329</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$66,161,015	\$60,992,329
2. Combined valuation payroll	18,162,972	18,846,115
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(32.31%)	(27.83%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Lane County Education Service District/4276  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Lane County Education Service District/4276

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013

Lane County Education Service District/4276

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Lane County Education Service District -- #4276**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Lane County Education Service District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Lane County Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Lane County Education Service District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(5.00%)	(5.00%)	(5.00%)
<b>Net pension contribution rate</b>	<b>20.14%</b>	<b>15.22%</b>	<b>19.32%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>20.70%</b>	<b>15.70%</b>	<b>19.80%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.15%	13.73%	16.44%
July 1, 2013 to June 30, 2015	17.56%	15.66%	18.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Lane County Education Service District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$15,966,511	\$26,352,943
Allocated pooled OPSRP UAL	671,411	178,714
Side account	5,372,792	5,039,830
Net unfunded pension actuarial accrued liability	11,265,130	21,491,827
Combined valuation payroll	9,525,891	10,474,158
Net pension UAL as a percentage of payroll	118%	205%
Calculated Side Account Rate Relief	(5.00%)	(4.14%)
Allocated Pooled RHIA UAL	\$199,857	\$271,338

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$5,039,830</b>	<b>\$5,039,830</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(377,281)	(377,281)
5. Side account earnings during 2012		711,243	711,243
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$5,372,792</b>	<b>\$5,372,792</b>

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$5,372,792	\$5,039,830
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$5,372,792</b>	<b>\$5,039,830</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$5,372,792	\$5,039,830
2. Combined valuation payroll	9,525,891	10,474,158
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.00%)	(4.14%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Lake Oswego School District/4268  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Lake Oswego School District/4268

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Lake Oswego School District/4268

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Lake Oswego School District -- #4268**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for Lake Oswego School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Lake Oswego School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Lake Oswego School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(12.71%)	(12.71%)	(12.71%)
<b>Net pension contribution rate</b>	<b>12.43%</b>	<b>7.51%</b>	<b>11.61%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>12.99%</b>	<b>7.99%</b>	<b>12.09%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.27%	6.85%	9.56%
July 1, 2013 to June 30, 2015	10.05%	8.15%	10.88%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Lake Oswego School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$53,258,896	\$79,516,621
Allocated pooled OPSRP UAL	2,239,601	539,247
Side account	45,536,299	42,806,983
Net unfunded pension actuarial accrued liability	9,962,198	37,248,885
Combined valuation payroll	31,775,160	31,604,427
Net pension UAL as a percentage of payroll	31%	118%
Calculated Side Account Rate Relief	(12.71%)	(11.65%)
Allocated Pooled RHIA UAL	\$666,656	\$818,729

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$42,806,983</b>	<b>\$42,806,983</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(3,309,502)	(3,309,502)
5. Side account earnings during 2012		6,040,818	6,040,818
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$45,536,299</b>	<b>\$45,536,299</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$27,629,516	\$25,948,886
Side Account 2	17,906,783	16,858,097
Side Account 3	0	0
<b>Total</b>	<b>\$45,536,299</b>	<b>\$42,806,983</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$45,536,299	\$42,806,983
2. Combined valuation payroll	31,775,160	31,604,427
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.71%)	(11.65%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

La Grande Public Schools/3965  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
La Grande Public Schools/3965

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
La Grande Public Schools/3965

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**La Grande Public Schools -- #3965**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for La Grande Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to La Grande Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for La Grande Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.97%)	(10.97%)	(10.97%)
<b>Net pension contribution rate</b>	<b>14.17%</b>	<b>9.25%</b>	<b>13.35%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>14.73%</b>	<b>9.73%</b>	<b>13.83%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.83%	8.41%	11.12%
July 1, 2013 to June 30, 2015	11.80%	9.90%	12.63%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***La Grande Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$14,837,126	\$22,346,385
Allocated pooled OPSRP UAL	623,919	151,543
Side account	10,947,564	10,225,989
Net unfunded pension actuarial accrued liability	4,513,481	12,271,939
Combined valuation payroll	8,852,081	8,881,724
Net pension UAL as a percentage of payroll	51%	138%
Calculated Side Account Rate Relief	(10.97%)	(9.90%)
Allocated Pooled RHIA UAL	\$185,720	\$230,086

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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## Side Account Information

### Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$10,225,989</b>	<b>\$10,225,989</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(719,994)	(719,994)
5. Side account earnings during 2012		1,443,569	1,443,569
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$10,947,564</b>	<b>\$10,947,564</b>

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## Side Account Information

### Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$8,705,785	\$8,131,100
Side Account 2	2,241,779	2,094,889
Side Account 3	0	0
<b>Total</b>	<b>\$10,947,564</b>	<b>\$10,225,989</b>

### Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$10,947,564	\$10,225,989
2. Combined valuation payroll	8,852,081	8,881,724
3. Amortization factor	11.272	11.626
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(10.97%)	(9.90%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

John Day School District/4315  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
John Day School District/4315

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
John Day School District/4315

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**John Day School District -- #4315**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for John Day School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to John Day School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for John Day School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(11.05%)	(11.05%)	(11.05%)
<b>Net pension contribution rate</b>	<b>14.09%</b>	<b>9.17%</b>	<b>13.27%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>14.65%</b>	<b>9.65%</b>	<b>13.75%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.59%	9.17%	11.88%
July 1, 2013 to June 30, 2015	12.58%	10.68%	13.41%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***John Day School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$5,711,599	\$9,432,596
Allocated pooled OPSRP UAL	240,180	63,968
Side account	4,242,656	3,974,526
Net unfunded pension actuarial accrued liability	1,709,123	5,522,038
Combined valuation payroll	3,407,637	3,749,050
Net pension UAL as a percentage of payroll	50%	147%
Calculated Side Account Rate Relief	(11.05%)	(9.12%)
Allocated Pooled RHIA UAL	\$71,494	\$97,121

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$3,974,526</b>	<b>\$3,974,526</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(293,159)	(293,159)
5. Side account earnings during 2012		562,289	562,289
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$4,242,656</b>	<b>\$4,242,656</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$4,242,656	\$3,974,526
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$4,242,656</b>	<b>\$3,974,526</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$4,242,656	\$3,974,526
2. Combined valuation payroll	3,407,637	3,749,050
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(11.05%)	(9.12%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Jefferson School District #14Cj/3729  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Jefferson School District #14Cj/3729

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Jefferson School District #14Cj/3729

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Jefferson School District #14Cj -- #3729**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for Jefferson School District #14Cj to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Jefferson School District #14Cj.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Jefferson School District #14Cj***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(15.79%)	(15.79%)	(15.79%)
<b>Net pension contribution rate</b>	<b>9.35%</b>	<b>4.43%</b>	<b>8.53%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>9.91%</b>	<b>4.91%</b>	<b>9.01%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.13%	4.71%	7.42%
July 1, 2013 to June 30, 2015	7.32%	5.42%	8.15%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Jefferson School District #14Cj***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$7,246,966	\$10,810,896
Allocated pooled OPSRP UAL	304,744	73,315
Side account	7,695,251	7,185,873
Net unfunded pension actuarial accrued liability	(143,541)	3,698,338
Combined valuation payroll	4,323,663	4,296,865
Net pension UAL as a percentage of payroll	(3%)	86%
Calculated Side Account Rate Relief	(15.79%)	(14.38%)
Allocated Pooled RHIA UAL	\$90,712	\$111,312

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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## Side Account Information

### Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$7,185,873</b>	<b>\$7,185,873</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(509,818)	(509,818)
5. Side account earnings during 2012		1,020,195	1,020,195
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$7,695,251</b>	<b>\$7,695,251</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$7,695,251	\$7,185,873
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$7,695,251</b>	<b>\$7,185,873</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$7,695,251	\$7,185,873
2. Combined valuation payroll	4,323,663	4,296,865
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(15.79%)	(14.38%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

InterMountain Education Service District/4223  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
InterMountain Education Service District/4223

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
InterMountain Education Service District/4223

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**InterMountain Education Service District -- #4223**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for InterMountain Education Service District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to InterMountain Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for InterMountain Education Service District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.71%)	(9.71%)	(9.71%)
<b>Net pension contribution rate</b>	<b>15.43%</b>	<b>10.51%</b>	<b>14.61%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.99%</b>	<b>10.99%</b>	<b>15.09%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.33%	10.91%	13.62%
July 1, 2013 to June 30, 2015	13.49%	11.59%	14.32%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***InterMountain Education Service District***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Allocated pooled T1/T2 UAL	\$16,449,544	\$26,558,967
Allocated pooled OPSRP UAL	691,723	180,111
Side account	10,750,184	10,079,852
Net unfunded pension actuarial accrued liability	6,391,083	16,659,226
Combined valuation payroll	9,814,077	10,556,044
Net pension UAL as a percentage of payroll	65%	158%
Calculated Side Account Rate Relief	(9.71%)	(8.21%)
Allocated Pooled RHIA UAL	\$205,904	\$273,460

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$10,079,852</b>	<b>\$10,079,852</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(756,083)	(756,083)
5. Side account earnings during 2012		1,428,415	1,428,415
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$10,750,184</b>	<b>\$10,750,184</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$6,675,113	\$5,822,023
Side Account 2	4,075,071	4,257,829
Side Account 3	0	0
<b>Total</b>	<b>\$10,750,184</b>	<b>\$10,079,852</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$10,750,184	\$10,079,852
2. Combined valuation payroll	9,814,077	10,556,044
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.71%)	(8.21%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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111 SW Fifth Avenue, Suite 3700  
Portland, OR 97204-3654  
503 227 0634

December 2013

Hood River County School District/3409  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Hood River County School District/3409

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Hood River County School District/3409

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Hood River County School District -- #3409**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Hood River County School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Hood River County School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Hood River County School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.59%)	(9.59%)	(9.59%)
<b>Net pension contribution rate</b>	<b>15.55%</b>	<b>10.63%</b>	<b>14.73%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.11%</b>	<b>11.11%</b>	<b>15.21%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.55%	9.13%	11.84%
July 1, 2013 to June 30, 2015	13.20%	11.30%	14.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Hood River County School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$37,963,105	\$58,754,315
Allocated pooled OPSRP UAL	1,596,394	398,446
Side account	24,463,782	23,058,556
Net unfunded pension actuarial accrued liability	15,095,717	36,094,205
Combined valuation payroll	22,649,432	23,352,306
Net pension UAL as a percentage of payroll	67%	155%
Calculated Side Account Rate Relief	(9.59%)	(8.50%)
Allocated Pooled RHIA UAL	\$475,195	\$604,953

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$23,058,556</b>	<b>\$23,058,556</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,830,808)	(1,830,808)
5. Side account earnings during 2012		3,238,033	3,238,033
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$24,463,782</b>	<b>\$24,463,782</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$15,486,687	\$14,596,966
Side Account 2	8,977,095	8,461,590
Side Account 3	0	0
<b>Total</b>	<b>\$24,463,782</b>	<b>\$23,058,556</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$24,463,782	\$23,058,556
2. Combined valuation payroll	22,649,432	23,352,306
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.59%)	(8.50%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

## Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Hillsboro School District #1J/4341  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Hillsboro School District #1J/4341

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Hillsboro School District #1J/4341

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Hillsboro School District #1J -- #4341**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Hillsboro School District #1J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Hillsboro School District #1J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Hillsboro School District #1J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(7.50%)	(7.50%)	(7.50%)
<b>Net pension contribution rate</b>	<b>17.64%</b>	<b>12.72%</b>	<b>16.82%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>18.20%</b>	<b>13.20%</b>	<b>17.30%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.12%	10.70%	13.41%
July 1, 2013 to June 30, 2015	14.74%	12.84%	15.57%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Hillsboro School District #1J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$165,044,216	\$245,021,471
Allocated pooled OPSRP UAL	6,940,308	1,661,627
Side account	83,207,575	78,806,336
Net unfunded pension actuarial accrued liability	88,776,949	167,876,762
Combined valuation payroll	98,468,177	97,385,466
Net pension UAL as a percentage of payroll	90%	172%
Calculated Side Account Rate Relief	(7.50%)	(6.96%)
Allocated Pooled RHIA UAL	\$2,065,904	\$2,522,820

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$78,806,336</b>	<b>\$78,806,336</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(6,709,308)	(6,709,308)
5. Side account earnings during 2012		11,111,547	11,111,547
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$83,207,575</b>	<b>\$83,207,575</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$83,207,575	\$78,806,336
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$83,207,575</b>	<b>\$78,806,336</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$83,207,575	\$78,806,336
2. Combined valuation payroll	98,468,177	97,385,466
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.50%)	(6.96%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

High Desert Education Service District/4252  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
High Desert Education Service District/4252

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
High Desert Education Service District/4252

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

High Desert Education Service District -- #4252

DECEMBER 2013

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## Executive Summary

Milliman has prepared this report for High Desert Education Service District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to High Desert Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for High Desert Education Service District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.60%)	(8.60%)	(8.60%)
<b>Net pension contribution rate</b>	<b>16.54%</b>	<b>11.62%</b>	<b>15.72%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>17.10%</b>	<b>12.10%</b>	<b>16.20%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.31%	10.89%	13.60%
July 1, 2013 to June 30, 2015	14.93%	13.03%	15.76%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***High Desert Education Service District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$17,330,396	\$29,950,729
Allocated pooled OPSRP UAL	728,764	203,113
Side account	10,024,146	9,372,360
Net unfunded pension actuarial accrued liability	8,035,014	20,781,482
Combined valuation payroll	10,339,608	11,904,123
Net pension UAL as a percentage of payroll	78%	175%
Calculated Side Account Rate Relief	(8.60%)	(6.77%)
Allocated Pooled RHIA UAL	\$216,929	\$308,382

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$9,372,360</b>	<b>\$9,372,360</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(673,695)	(673,695)
5. Side account earnings during 2012		1,326,481	1,326,481
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$10,024,146</b>	<b>\$10,024,146</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$10,024,146	\$9,372,360
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$10,024,146</b>	<b>\$9,372,360</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$10,024,146	\$9,372,360
2. Combined valuation payroll	10,339,608	11,904,123
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.60%)	(6.77%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Hermiston School District #8R/4258  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Hermiston School District #8R/4258

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Hermiston School District #8R/4258

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Hermiston School District #8R -- #4258**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Hermiston School District #8R to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Hermiston School District #8R.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Hermiston School District #8R***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.56%)	(9.56%)	(9.56%)
<b>Net pension contribution rate</b>	<b>15.58%</b>	<b>10.66%</b>	<b>14.76%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.14%</b>	<b>11.14%</b>	<b>15.24%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.28%	8.86%	11.57%
July 1, 2013 to June 30, 2015	12.55%	10.65%	13.38%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Hermiston School District #8R***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$33,598,876	\$48,367,052
Allocated pooled OPSRP UAL	1,412,873	328,004
Side account	21,618,681	20,443,535
Net unfunded pension actuarial accrued liability	13,393,068	28,251,521
Combined valuation payroll	20,045,659	19,223,817
Net pension UAL as a percentage of payroll	67%	147%
Calculated Side Account Rate Relief	(9.56%)	(9.15%)
Allocated Pooled RHIA UAL	\$420,566	\$498,003

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$20,443,535</b>	<b>\$20,443,535</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(1,702,399)	(1,702,399)
5. Side account earnings during 2012		2,879,545	2,879,545
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$21,618,681</b>	<b>\$21,618,681</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$14,197,162	\$13,424,375
Side Account 2	7,421,520	7,019,160
Side Account 3	0	0
<b>Total</b>	<b>\$21,618,681</b>	<b>\$20,443,535</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$21,618,681	\$20,443,535
2. Combined valuation payroll	20,045,659	19,223,817
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.56%)	(9.15%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Harney County School District #3/4326  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Harney County School District #3/4326

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Harney County School District #3/4326

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Harney County School District #3 -- #4326

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Harney County School District #3 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Harney County School District #3.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Harney County School District #3***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(29.35%)	(29.35%)	(29.35%)
<b>Net pension contribution rate</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Harney County School District #3***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$7,220,678	\$11,761,294
Allocated pooled OPSRP UAL	303,638	79,760
Side account	14,249,405	13,177,634
Net unfunded pension actuarial accrued liability	(6,725,089)	(1,336,580)
Combined valuation payroll	4,307,979	4,674,607
Net pension UAL as a percentage of payroll	(156%)	(29%)
Calculated Side Account Rate Relief	(29.35%)	(24.25%)
Allocated Pooled RHIA UAL	\$90,383	\$121,098

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$13,177,634</b>	<b>\$13,177,634</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(804,239)	(804,239)
5. Side account earnings during 2012		1,878,010	1,878,010
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$14,249,405</b>	<b>\$14,249,405</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$6,224,327	\$5,774,733
Side Account 2	8,025,077	7,402,900
Side Account 3	0	0
<b>Total</b>	<b>\$14,249,405</b>	<b>\$13,177,634</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$14,249,405	\$13,177,634
2. Combined valuation payroll	4,307,979	4,674,607
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(29.35%)	(24.25%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Gresham-Barlow School District #10/4332  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Gresham-Barlow School District #10/4332

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Gresham-Barlow School District #10/4332

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Gresham-Barlow School District #10 -- #4332

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Gresham-Barlow School District #10 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Gresham-Barlow School District #10.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory Employer Rates Calculated as of December 31, 2012, for Gresham-Barlow School District #10**

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(11.52%)	(11.52%)	(11.52%)
<b>Net pension contribution rate</b>	<b>13.62%</b>	<b>8.70%</b>	<b>12.80%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>14.18%</b>	<b>9.18%</b>	<b>13.28%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.21%	7.79%	10.50%
July 1, 2013 to June 30, 2015	11.14%	9.24%	11.97%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Gresham-Barlow School District #10***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$87,432,725	\$132,314,946
Allocated pooled OPSRP UAL	3,676,651	897,301
Side account	67,733,139	64,564,676
Net unfunded pension actuarial accrued liability	23,376,237	68,647,571
Combined valuation payroll	52,163,846	52,589,484
Net pension UAL as a percentage of payroll	45%	131%
Calculated Side Account Rate Relief	(11.52%)	(10.56%)
Allocated Pooled RHIA UAL	\$1,094,420	\$1,362,357

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$64,564,676</b>	<b>\$64,564,676</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(5,865,899)	(5,865,899)
5. Side account earnings during 2012		9,036,362	9,036,362
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$67,733,139</b>	<b>\$67,733,139</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$40,017,222	\$38,145,676
Side Account 2	27,715,917	26,419,000
Side Account 3	0	0
<b>Total</b>	<b>\$67,733,139</b>	<b>\$64,564,676</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$67,733,139	\$64,564,676
2. Combined valuation payroll	52,163,846	52,589,484
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(11.52%)	(10.56%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Greater Albany School District #8J/4260  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Greater Albany School District #8J/4260

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Greater Albany School District #8J/4260

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Greater Albany School District #8J -- #4260**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Greater Albany School District #8J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Greater Albany School District #8J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Greater Albany School District #8J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.53%)	(8.53%)	(8.53%)
<b>Net pension contribution rate</b>	<b>16.61%</b>	<b>11.69%</b>	<b>15.79%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>17.17%</b>	<b>12.17%</b>	<b>16.27%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.20%	9.78%	12.49%
July 1, 2013 to June 30, 2015	13.85%	11.95%	14.68%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### *Retiree Healthcare*

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Greater Albany School District #8J**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$66,282,708	\$98,770,821
Allocated pooled OPSRP UAL	2,787,268	669,820
Side account	38,020,001	35,846,918
Net unfunded pension actuarial accrued liability	31,049,975	63,593,723
Combined valuation payroll	39,545,387	39,257,141
Net pension UAL as a percentage of payroll	79%	162%
Calculated Side Account Rate Relief	(8.53%)	(7.85%)
Allocated Pooled RHIA UAL	\$829,679	\$1,016,976

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$35,846,918</b>	<b>\$35,846,918</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(2,893,168)	(2,893,168)
5. Side account earnings during 2012		5,067,252	5,067,252
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$38,020,001</b>	<b>\$38,020,001</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$38,020,001	\$35,846,918
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$38,020,001</b>	<b>\$35,846,918</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$38,020,001	\$35,846,918
2. Combined valuation payroll	39,545,387	39,257,141
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.53%)	(7.85%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

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Milliman  
111 SW Fifth Avenue, Suite 3700  
Portland, OR 97204-3654  
503 227 0634

December 2013

Glide School District #12/3316  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Glide School District #12/3316

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Glide School District #12/3316

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Glide School District #12 -- #3316**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for Glide School District #12 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Glide School District #12.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Glide School District #12***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.96%)	(9.96%)	(9.96%)
<b>Net pension contribution rate</b>	<b>15.18%</b>	<b>10.26%</b>	<b>14.36%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.74%</b>	<b>10.74%</b>	<b>14.84%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.89%	10.47%	13.18%
July 1, 2013 to June 30, 2015	13.33%	11.43%	14.16%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Glide School District #12***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$5,280,153	\$8,531,406
Allocated pooled OPSRP UAL	222,037	57,856
Side account	3,537,952	3,301,273
Net unfunded pension actuarial accrued liability	1,964,238	5,287,989
Combined valuation payroll	3,150,229	3,390,866
Net pension UAL as a percentage of payroll	62%	156%
Calculated Side Account Rate Relief	(9.96%)	(8.37%)
Allocated Pooled RHIA UAL	\$66,093	\$87,842

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$3,301,273</b>	<b>\$3,301,273</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(231,957)	(231,957)
5. Side account earnings during 2012		469,636	469,636
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$3,537,952</b>	<b>\$3,537,952</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$3,537,952	\$3,301,273
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$3,537,952</b>	<b>\$3,301,273</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$3,537,952	\$3,301,273
2. Combined valuation payroll	3,150,229	3,390,866
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.96%)	(8.37%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Gladstone School District #115/3160  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Gladstone School District #115/3160

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Gladstone School District #115/3160

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Gladstone School District #115 -- #3160**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for Gladstone School District #115 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Gladstone School District #115.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Gladstone School District #115***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(23.08%)	(23.08%)	(23.08%)
<b>Net pension contribution rate</b>	<b>2.06%</b>	<b>0.00%</b>	<b>1.24%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>2.62%</b>	<b>0.48%</b>	<b>1.72%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.23%	0.00%	2.52%
July 1, 2013 to June 30, 2015	1.20%	0.00%	2.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Gladstone School District #115***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$13,148,470	\$20,167,499
Allocated pooled OPSRP UAL	552,909	136,767
Side account	20,410,585	19,103,140
Net unfunded pension actuarial accrued liability	(6,709,206)	1,201,126
Combined valuation payroll	7,844,600	8,015,711
Net pension UAL as a percentage of payroll	(86%)	15%
Calculated Side Account Rate Relief	(23.08%)	(20.50%)
Allocated Pooled RHIA UAL	\$164,583	\$207,651

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$19,103,140</b>	<b>\$19,103,140</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,396,059)	(1,396,059)
5. Side account earnings during 2012		2,704,503	2,704,503
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$20,410,585</b>	<b>\$20,410,585</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$20,410,585	\$19,103,140
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$20,410,585</b>	<b>\$19,103,140</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$20,410,585	\$19,103,140
2. Combined valuation payroll	7,844,600	8,015,711
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(23.08%)	(20.50%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654  
503 227 0634

December 2013

Gervais School District #1/4329  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Gervais School District #1/4329

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Gervais School District #1/4329

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Gervais School District #1 -- #4329**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Gervais School District #1 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Gervais School District #1.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Gervais School District #1***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(17.11%)	(17.11%)	(17.11%)
<b>Net pension contribution rate</b>	<b>8.03%</b>	<b>3.11%</b>	<b>7.21%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>8.59%</b>	<b>3.59%</b>	<b>7.69%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.29%	2.87%	5.58%
July 1, 2013 to June 30, 2015	6.30%	4.40%	7.13%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Gervais School District #1***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$9,544,566	\$14,540,418
Allocated pooled OPSRP UAL	401,361	98,607
Side account	10,983,016	10,349,217
Net unfunded pension actuarial accrued liability	(1,037,089)	4,289,808
Combined valuation payroll	5,694,450	5,779,189
Net pension UAL as a percentage of payroll	(18%)	74%
Calculated Side Account Rate Relief	(17.11%)	(15.40%)
Allocated Pooled RHIA UAL	\$119,472	\$149,713

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$10,349,217</b>	<b>\$10,349,217</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(825,896)	(825,896)
5. Side account earnings during 2012		1,460,696	1,460,696
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$10,983,016</b>	<b>\$10,983,016</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$10,983,016	\$10,349,217
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$10,983,016</b>	<b>\$10,349,217</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$10,983,016	\$10,349,217
2. Combined valuation payroll	5,694,450	5,779,189
3. Amortization factor	11.272	11.626
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(17.11%)	(15.40%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

Gaston Public Schools/4034  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Gaston Public Schools/4034

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Gaston Public Schools/4034

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Gaston Public Schools -- #4034**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Gaston Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Gaston Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Gaston Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(18.30%)	(18.30%)	(18.30%)
<b>Net pension contribution rate</b>	<b>6.84%</b>	<b>1.92%</b>	<b>6.02%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>7.40%</b>	<b>2.40%</b>	<b>6.50%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.24%	3.82%	6.53%
July 1, 2013 to June 30, 2015	4.64%	2.74%	5.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Gaston Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$3,892,164	\$5,669,430
Allocated pooled OPSRP UAL	163,670	38,448
Side account	4,790,672	4,468,424
Net unfunded pension actuarial accrued liability	(734,838)	1,239,454
Combined valuation payroll	2,322,131	2,253,354
Net pension UAL as a percentage of payroll	(32%)	55%
Calculated Side Account Rate Relief	(18.30%)	(17.06%)
Allocated Pooled RHIA UAL	\$48,719	\$58,374

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$4,468,424</b>	<b>\$4,468,424</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(311,114)	(311,114)
5. Side account earnings during 2012		635,362	635,362
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$4,790,672</b>	<b>\$4,790,672</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$2,067,405	\$1,930,562
Side Account 2	2,723,267	2,537,862
Side Account 3	0	0
<b>Total</b>	<b>\$4,790,672</b>	<b>\$4,468,424</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$4,790,672	\$4,468,424
2. Combined valuation payroll	2,322,131	2,253,354
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(18.30%)	(17.06%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Forest Grove School District/4313  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Forest Grove School District/4313

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Forest Grove School District/4313

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Forest Grove School District -- #4313**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Forest Grove School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Forest Grove School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Forest Grove School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(8.02%)	(8.02%)	(8.02%)
<b>Net pension contribution rate</b>	<b>17.12%</b>	<b>12.20%</b>	<b>16.30%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>17.68%</b>	<b>12.68%</b>	<b>16.78%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.49%	11.07%	13.78%
July 1, 2013 to June 30, 2015	14.81%	12.91%	15.64%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Forest Grove School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$44,334,996	\$70,472,872
Allocated pooled OPSRP UAL	1,864,340	477,916
Side account	23,911,974	22,448,005
Net unfunded pension actuarial accrued liability	22,287,362	48,502,783
Combined valuation payroll	26,451,010	28,009,927
Net pension UAL as a percentage of payroll	84%	173%
Calculated Side Account Rate Relief	(8.02%)	(6.89%)
Allocated Pooled RHIA UAL	\$554,953	\$725,611

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$22,448,005</b>	<b>\$22,448,005</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,719,375)	(1,719,375)
5. Side account earnings during 2012		3,184,344	3,184,344
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$23,911,974</b>	<b>\$23,911,974</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$23,911,974	\$22,448,005
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$23,911,974</b>	<b>\$22,448,005</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$23,911,974	\$22,448,005
2. Combined valuation payroll	26,451,010	28,009,927
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.02%)	(6.89%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Milliman  
111 SW Fifth Avenue, Suite 3700  
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December 2013

Fern Ridge School District/3494  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Fern Ridge School District/3494

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Fern Ridge School District/3494

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Fern Ridge School District -- #3494

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Fern Ridge School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Fern Ridge School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Fern Ridge School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(11.95%)	(11.95%)	(11.95%)
<b>Net pension contribution rate</b>	<b>13.19%</b>	<b>8.27%</b>	<b>12.37%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>13.75%</b>	<b>8.75%</b>	<b>12.85%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.94%	7.52%	10.23%
July 1, 2013 to June 30, 2015	11.26%	9.36%	12.09%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Fern Ridge School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$9,408,003	\$14,667,956
Allocated pooled OPSRP UAL	395,618	99,472
Side account	7,560,898	7,077,268
Net unfunded pension actuarial accrued liability	2,242,723	7,690,160
Combined valuation payroll	5,612,974	5,829,880
Net pension UAL as a percentage of payroll	40%	132%
Calculated Side Account Rate Relief	(11.95%)	(10.44%)
Allocated Pooled RHIA UAL	\$117,763	\$151,026

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$7,077,268</b>	<b>\$7,077,268</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(514,743)	(514,743)
5. Side account earnings during 2012		999,373	999,373
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$7,560,898</b>	<b>\$7,560,898</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$7,560,898	\$7,077,268
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$7,560,898</b>	<b>\$7,077,268</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$7,560,898	\$7,077,268
2. Combined valuation payroll	5,612,974	5,829,880
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(11.95%)	(10.44%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Falls City School District/3887  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Falls City School District/3887

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Falls City School District/3887

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Falls City School District -- #3887**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Falls City School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Falls City School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Falls City School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(21.23%)	(21.23%)	(21.23%)
<b>Net pension contribution rate</b>	<b>3.91%</b>	<b>0.00%</b>	<b>3.09%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>4.47%</b>	<b>0.48%</b>	<b>3.57%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	3.78%	2.36%	5.07%
July 1, 2013 to June 30, 2015	2.41%	0.51%	3.24%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Falls City School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$1,483,999	\$2,237,415
Allocated pooled OPSRP UAL	62,404	15,173
Side account	2,118,405	1,994,741
Net unfunded pension actuarial accrued liability	(572,002)	257,847
Combined valuation payroll	885,379	889,276
Net pension UAL as a percentage of payroll	(65%)	29%
Calculated Side Account Rate Relief	(21.23%)	(19.29%)
Allocated Pooled RHIA UAL	\$18,576	\$23,037

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$1,994,741</b>	<b>\$1,994,741</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(154,983)	(154,983)
5. Side account earnings during 2012		279,647	279,647
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,118,405</b>	<b>\$2,118,405</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$2,118,405	\$1,994,741
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,118,405</b>	<b>\$1,994,741</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$2,118,405	\$1,994,741
2. Combined valuation payroll	885,379	889,276
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(21.23%)	(19.29%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Eugene School District 4J/3473  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Eugene School District 4J/3473

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Eugene School District 4J/3473

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Eugene School District 4J -- #3473

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Eugene School District 4J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Eugene School District 4J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Eugene School District 4J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(5.19%)	(5.19%)	(5.19%)
<b>Net pension contribution rate</b>	<b>19.95%</b>	<b>15.03%</b>	<b>19.13%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>20.51%</b>	<b>15.51%</b>	<b>19.61%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.92%	13.50%	16.21%
July 1, 2013 to June 30, 2015	17.15%	15.25%	17.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Eugene School District 4J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$133,062,386	\$205,928,237
Allocated pooled OPSRP UAL	5,595,434	1,396,514
Side account	46,485,504	43,299,428
Net unfunded pension actuarial accrued liability	92,172,316	164,025,323
Combined valuation payroll	79,387,275	81,847,592
Net pension UAL as a percentage of payroll	116%	200%
Calculated Side Account Rate Relief	(5.19%)	(4.55%)
Allocated Pooled RHIA UAL	\$1,665,579	\$2,120,303

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$43,299,428</b>	<b>\$43,299,428</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(2,963,464)	(2,963,464)
5. Side account earnings during 2012		6,150,540	6,150,540
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$46,485,504</b>	<b>\$46,485,504</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$46,485,504	\$43,299,428
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$46,485,504</b>	<b>\$43,299,428</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$46,485,504	\$43,299,428
2. Combined valuation payroll	79,387,275	81,847,592
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.19%)	(4.55%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Milliman  
111 SW Fifth Avenue, Suite 3700  
Portland, OR 97204-3654  
503 227 0634

December 2013

Estacada School District #108/4323  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Estacada School District #108/4323

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Estacada School District #108/4323

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Estacada School District #108 -- #4323**

**DECEMBER 2013**

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# Executive Summary

Milliman has prepared this report for Estacada School District #108 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Estacada School District #108.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Estacada School District #108***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.46%)	(9.46%)	(9.46%)
<b>Net pension contribution rate</b>	<b>15.68%</b>	<b>10.76%</b>	<b>14.86%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.24%</b>	<b>11.24%</b>	<b>15.34%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.12%	9.70%	12.41%
July 1, 2013 to June 30, 2015	13.23%	11.33%	14.06%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Estacada School District #108***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$16,993,679	\$25,928,698
Allocated pooled OPSRP UAL	714,605	175,837
Side account	10,816,311	10,145,174
Net unfunded pension actuarial accrued liability	6,891,973	15,959,361
Combined valuation payroll	10,138,717	10,305,539
Net pension UAL as a percentage of payroll	68%	155%
Calculated Side Account Rate Relief	(9.46%)	(8.47%)
Allocated Pooled RHIA UAL	\$212,715	\$266,970

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$10,145,174</b>	<b>\$10,145,174</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(765,070)	(765,070)
5. Side account earnings during 2012		1,437,208	1,437,208
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$10,816,311</b>	<b>\$10,816,311</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$10,816,311	\$10,145,174
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$10,816,311</b>	<b>\$10,145,174</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$10,816,311	\$10,145,174
2. Combined valuation payroll	10,138,717	10,305,539
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.46%)	(8.47%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Echo School District/3927  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Echo School District/3927

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Echo School District/3927

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Echo School District -- #3927

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Echo School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Echo School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Echo School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.83%)	(10.83%)	(10.83%)
<b>Net pension contribution rate</b>	<b>14.31%</b>	<b>9.39%</b>	<b>13.49%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>14.87%</b>	<b>9.87%</b>	<b>13.97%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.12%	6.70%	9.41%
July 1, 2013 to June 30, 2015	11.62%	9.72%	12.45%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Echo School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$2,428,540	\$3,628,806
Allocated pooled OPSRP UAL	102,123	24,609
Side account	1,768,014	1,689,425
Net unfunded pension actuarial accrued liability	762,649	1,963,990
Combined valuation payroll	1,448,908	1,442,294
Net pension UAL as a percentage of payroll	53%	136%
Calculated Side Account Rate Relief	(10.83%)	(10.08%)
Allocated Pooled RHIA UAL	\$30,399	\$37,363

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$1,689,425</b>	<b>\$1,689,425</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(156,548)	(156,548)
5. Side account earnings during 2012		236,137	236,137
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$1,768,014</b>	<b>\$1,768,014</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$1,768,014	\$1,689,425
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$1,768,014</b>	<b>\$1,689,425</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$1,768,014	\$1,689,425
2. Combined valuation payroll	1,448,908	1,442,294
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.83%)	(10.08%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Douglas Education Service District/4237  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Douglas Education Service District/4237

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Douglas Education Service District/4237

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Douglas Education Service District -- #4237**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Douglas Education Service District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Douglas Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Douglas Education Service District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(4.56%)	(4.56%)	(4.56%)
<b>Net pension contribution rate</b>	<b>20.58%</b>	<b>15.66%</b>	<b>19.76%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>21.14%</b>	<b>16.14%</b>	<b>20.24%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.94%	10.52%	13.23%
July 1, 2013 to June 30, 2015	17.57%	15.67%	18.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Douglas Education Service District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$13,707,864	\$21,616,761
Allocated pooled OPSRP UAL	576,432	146,595
Side account	4,204,114	4,123,050
Net unfunded pension actuarial accrued liability	10,080,182	17,640,306
Combined valuation payroll	8,178,344	8,591,730
Net pension UAL as a percentage of payroll	123%	205%
Calculated Side Account Rate Relief	(4.56%)	(4.13%)
Allocated Pooled RHIA UAL	\$171,585	\$222,573

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$4,123,050</b>	<b>\$4,123,050</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(488,418)	(488,418)
5. Side account earnings during 2012		570,482	570,482
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$4,204,114</b>	<b>\$4,204,114</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$4,204,114	\$4,123,050
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$4,204,114</b>	<b>\$4,123,050</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$4,204,114	\$4,123,050
2. Combined valuation payroll	8,178,344	8,591,730
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(4.56%)	(4.13%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Dayton Public Schools/4291  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Dayton Public Schools/4291

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Dayton Public Schools/4291

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Dayton Public Schools -- #4291**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Dayton Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Dayton Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Dayton Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(14.16%)	(14.16%)	(14.16%)
<b>Net pension contribution rate</b>	<b>10.98%</b>	<b>6.06%</b>	<b>10.16%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>11.54%</b>	<b>6.54%</b>	<b>10.64%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.96%	4.54%	7.25%
July 1, 2013 to June 30, 2015	8.26%	6.36%	9.09%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Dayton Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$8,650,368	\$12,518,418
Allocated pooled OPSRP UAL	363,758	84,894
Side account	8,234,620	7,774,953
Net unfunded pension actuarial accrued liability	779,506	4,828,359
Combined valuation payroll	5,160,956	4,975,531
Net pension UAL as a percentage of payroll	15%	97%
Calculated Side Account Rate Relief	(14.16%)	(13.44%)
Allocated Pooled RHIA UAL	\$108,279	\$128,894

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$7,774,953</b>	<b>\$7,774,953</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(638,665)	(638,665)
5. Side account earnings during 2012		1,100,332	1,100,332
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,234,620</b>	<b>\$8,234,620</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$3,494,246	\$3,299,323
Side Account 2	4,740,374	4,475,630
Side Account 3	0	0
<b>Total</b>	<b>\$8,234,620</b>	<b>\$7,774,953</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$8,234,620	\$7,774,953
2. Combined valuation payroll	5,160,956	4,975,531
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(14.16%)	(13.44%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

David Douglas School District/3843  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
David Douglas School District/3843

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
David Douglas School District/3843

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

David Douglas School District -- #3843

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for David Douglas School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to David Douglas School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for David Douglas School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(3.75%)	(3.75%)	(3.75%)
<b>Net pension contribution rate</b>	<b>21.39%</b>	<b>16.47%</b>	<b>20.57%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>21.95%</b>	<b>16.95%</b>	<b>21.05%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.83%	14.41%	17.12%
July 1, 2013 to June 30, 2015	18.53%	16.63%	19.36%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***David Douglas School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$92,900,711	\$149,601,061
Allocated pooled OPSRP UAL	3,906,587	1,014,528
Side account	23,452,655	21,885,731
Net unfunded pension actuarial accrued liability	73,354,643	128,729,858
Combined valuation payroll	55,426,139	59,459,969
Net pension UAL as a percentage of payroll	132%	217%
Calculated Side Account Rate Relief	(3.75%)	(3.17%)
Allocated Pooled RHIA UAL	\$1,162,864	\$1,540,340

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$21,885,731</b>	<b>\$21,885,731</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,536,207)	(1,536,207)
5. Side account earnings during 2012		3,104,131	3,104,131
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$23,452,655</b>	<b>\$23,452,655</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$23,452,655	\$21,885,731
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$23,452,655</b>	<b>\$21,885,731</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$23,452,655	\$21,885,731
2. Combined valuation payroll	55,426,139	59,459,969
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(3.75%)	(3.17%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Crook County School District/3274  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Crook County School District/3274

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Crook County School District/3274

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Crook County School District -- #3274**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Crook County School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Crook County School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Crook County School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(19.63%)	(19.63%)	(19.63%)
<b>Net pension contribution rate</b>	<b>5.51%</b>	<b>0.59%</b>	<b>4.69%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>6.07%</b>	<b>1.07%</b>	<b>5.17%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.98%	0.56%	3.27%
July 1, 2013 to June 30, 2015	3.70%	1.80%	4.53%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Crook County School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$21,138,551	\$31,686,807
Allocated pooled OPSRP UAL	888,902	214,886
Side account	27,909,426	26,348,952
Net unfunded pension actuarial accrued liability	(5,881,973)	5,552,741
Combined valuation payroll	12,611,618	12,594,139
Net pension UAL as a percentage of payroll	(47%)	44%
Calculated Side Account Rate Relief	(19.63%)	(18.00%)
Allocated Pooled RHIA UAL	\$264,597	\$326,258

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$26,348,952</b>	<b>\$26,348,952</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(2,147,747)	(2,147,747)
5. Side account earnings during 2012		3,710,221	3,710,221
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$27,909,426</b>	<b>\$27,909,426</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$12,167,913	\$11,490,969
Side Account 2	15,741,514	14,857,982
Side Account 3	0	0
<b>Total</b>	<b>\$27,909,426</b>	<b>\$26,348,952</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$27,909,426	\$26,348,952
2. Combined valuation payroll	12,611,618	12,594,139
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(19.63%)	(18.00%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Creswell School District #40/3502  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Creswell School District #40/3502

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Creswell School District #40/3502

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Creswell School District #40 -- #3502**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Creswell School District #40 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Creswell School District #40.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Creswell School District #40***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(4.48%)	(4.48%)	(4.48%)
<b>Net pension contribution rate</b>	<b>20.66%</b>	<b>15.74%</b>	<b>19.84%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>21.22%</b>	<b>16.22%</b>	<b>20.32%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.13%	13.71%	16.42%
July 1, 2013 to June 30, 2015	17.72%	15.82%	18.55%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Creswell School District #40***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$9,218,535	\$14,196,237
Allocated pooled OPSRP UAL	387,650	96,273
Side account	2,777,132	2,610,693
Net unfunded pension actuarial accrued liability	6,829,053	11,681,817
Combined valuation payroll	5,499,934	5,642,392
Net pension UAL as a percentage of payroll	124%	207%
Calculated Side Account Rate Relief	(4.48%)	(3.98%)
Allocated Pooled RHIA UAL	\$115,391	\$146,169

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$2,610,693</b>	<b>\$2,610,693</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(202,790)	(202,790)
5. Side account earnings during 2012		370,229	370,229
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,777,132</b>	<b>\$2,777,132</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$2,777,132	\$2,610,693
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,777,132</b>	<b>\$2,610,693</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$2,777,132	\$2,610,693
2. Combined valuation payroll	5,499,934	5,642,392
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(4.48%)	(3.98%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Corvallis School District #509J/3039  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Corvallis School District #509J/3039

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Corvallis School District #509J/3039

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Corvallis School District #509J -- #3039**

DECEMBER 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

Milliman has prepared this report for Corvallis School District #509J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Corvallis School District #509J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Corvallis School District #509J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.96%)	(10.96%)	(10.96%)
<b>Net pension contribution rate</b>	<b>14.18%</b>	<b>9.26%</b>	<b>13.36%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>14.74%</b>	<b>9.74%</b>	<b>13.84%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.38%	8.96%	11.67%
July 1, 2013 to June 30, 2015	11.82%	9.92%	12.65%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Corvallis School District #509J**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$49,536,943	\$76,504,130
Allocated pooled OPSRP UAL	2,083,088	518,817
Side account	37,008,515	35,348,507
Net unfunded pension actuarial accrued liability	14,611,516	41,674,440
Combined valuation payroll	29,554,580	30,407,092
Net pension UAL as a percentage of payroll	49%	137%
Calculated Side Account Rate Relief	(10.96%)	(9.88%)
Allocated Pooled RHIA UAL	\$620,068	\$787,711

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$35,348,507</b>	<b>\$35,348,507</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(3,000)	(3,000)
4. Amount transferred to employer reserves during 2012		(3,294,931)	(3,294,931)
5. Side account earnings during 2012		4,957,938	4,957,938
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$37,008,515</b>	<b>\$37,008,515</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$27,277,073	\$26,076,666
Side Account 2	3,867,291	3,699,783
Side Account 3	5,864,151	5,572,058
<b>Total</b>	<b>\$37,008,515</b>	<b>\$35,348,507</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$37,008,515	\$35,348,507
2. Combined valuation payroll	29,554,580	30,407,092
3. Amortization factor	11.442	11.783
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.96%)	(9.88%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Milliman  
111 SW Fifth Avenue, Suite 3700  
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503 227 0634

December 2013

Coos Bay School District #9/3242  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Coos Bay School District #9/3242

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Coos Bay School District #9/3242

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Coos Bay School District #9 -- #3242

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Coos Bay School District #9 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Coos Bay School District #9.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Coos Bay School District #9***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(6.24%)	(6.24%)	(6.24%)
<b>Net pension contribution rate</b>	<b>18.90%</b>	<b>13.98%</b>	<b>18.08%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>19.46%</b>	<b>14.46%</b>	<b>18.56%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.12%	12.70%	15.41%
July 1, 2013 to June 30, 2015	16.75%	14.85%	17.58%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Coos Bay School District #9***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$19,623,894	\$33,609,360
Allocated pooled OPSRP UAL	825,208	227,924
Side account	8,229,932	7,686,545
Net unfunded pension actuarial accrued liability	12,219,170	26,150,739
Combined valuation payroll	11,707,948	13,358,271
Net pension UAL as a percentage of payroll	104%	196%
Calculated Side Account Rate Relief	(6.24%)	(4.95%)
Allocated Pooled RHIA UAL	\$245,638	\$346,053

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$7,686,545</b>	<b>\$7,686,545</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(546,569)	(546,569)
5. Side account earnings during 2012		1,090,957	1,090,957
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,229,932</b>	<b>\$8,229,932</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$8,229,932	\$7,686,545
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,229,932</b>	<b>\$7,686,545</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$8,229,932	\$7,686,545
2. Combined valuation payroll	11,707,948	13,358,271
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(6.24%)	(4.95%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654  
503 227 0634

December 2013

Clatsop County School District #1C/3179  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Clatsop County School District #1C/3179

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Clatsop County School District #1C/3179

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Clatsop County School District #1C -- #3179

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Clatsop County School District #1C to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Clatsop County School District #1C.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Clatsop County School District #1C***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(22.64%)	(22.64%)	(22.64%)
<b>Net pension contribution rate</b>	<b>2.50%</b>	<b>0.00%</b>	<b>1.68%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>3.06%</b>	<b>0.48%</b>	<b>2.16%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.42%	0.00%	1.71%
July 1, 2013 to June 30, 2015	1.48%	0.00%	2.31%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Clatsop County School District #1C***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$14,241,939	\$21,825,405
Allocated pooled OPSRP UAL	598,891	148,010
Side account	21,683,582	20,395,160
Net unfunded pension actuarial accrued liability	(6,842,752)	1,578,255
Combined valuation payroll	8,496,982	8,674,657
Net pension UAL as a percentage of payroll	(81%)	18%
Calculated Side Account Rate Relief	(22.64%)	(20.22%)
Allocated Pooled RHIA UAL	\$178,270	\$224,721

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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## Side Account Information

### Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$20,395,160</b>	<b>\$20,395,160</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,593,183)	(1,593,183)
5. Side account earnings during 2012		2,882,604	2,882,604
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$21,683,582</b>	<b>\$21,683,582</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$21,683,582	\$20,395,160
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$21,683,582</b>	<b>\$20,395,160</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$21,683,582	\$20,395,160
2. Combined valuation payroll	8,496,982	8,674,657
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(22.64%)	(20.22%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Clackamas Education Service District/4259  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Clackamas Education Service District/4259

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Clackamas Education Service District/4259

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Clackamas Education Service District -- #4259**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Clackamas Education Service District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Clackamas Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Clackamas Education Service District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.08%)	(10.08%)	(10.08%)
<b>Net pension contribution rate</b>	<b>15.06%</b>	<b>10.14%</b>	<b>14.24%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.62%</b>	<b>10.62%</b>	<b>14.72%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.09%	9.67%	12.38%
July 1, 2013 to June 30, 2015	12.29%	10.39%	13.12%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Clackamas Education Service District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$23,509,523	\$34,279,058
Allocated pooled OPSRP UAL	988,604	232,465
Side account	15,940,466	14,899,139
Net unfunded pension actuarial accrued liability	8,557,661	19,612,384
Combined valuation payroll	14,026,180	13,624,447
Net pension UAL as a percentage of payroll	61%	144%
Calculated Side Account Rate Relief	(10.08%)	(9.41%)
Allocated Pooled RHIA UAL	\$294,275	\$352,948

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$14,899,139</b>	<b>\$14,899,139</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,063,800)	(1,063,800)
5. Side account earnings during 2012		2,106,127	2,106,127
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$15,940,466</b>	<b>\$15,940,466</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$15,940,466	\$14,899,139
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$15,940,466</b>	<b>\$14,899,139</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$15,940,466	\$14,899,139
2. Combined valuation payroll	14,026,180	13,624,447
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.08%)	(9.41%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

City of Phoenix School District/3414  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
City of Phoenix School District/3414

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
City of Phoenix School District/3414

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**City of Phoenix School District -- #3414**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for City of Phoenix School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to City of Phoenix School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for City of Phoenix School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(10.26%)	(10.26%)	(10.26%)
<b>Net pension contribution rate</b>	<b>14.88%</b>	<b>9.96%</b>	<b>14.06%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>15.44%</b>	<b>10.44%</b>	<b>14.54%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.25%	8.83%	11.54%
July 1, 2013 to June 30, 2015	12.64%	10.74%	13.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***City of Phoenix School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$18,627,206	\$28,973,436
Allocated pooled OPSRP UAL	783,296	196,485
Side account	12,853,640	12,128,238
Net unfunded pension actuarial accrued liability	6,556,862	17,041,683
Combined valuation payroll	11,113,307	11,515,691
Net pension UAL as a percentage of payroll	59%	148%
Calculated Side Account Rate Relief	(10.26%)	(9.06%)
Allocated Pooled RHIA UAL	\$233,162	\$298,320

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$12,128,238</b>	<b>\$12,128,238</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(983,584)	(983,584)
5. Side account earnings during 2012		1,709,986	1,709,986
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$12,853,640</b>	<b>\$12,853,640</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$12,853,640	\$12,128,238
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$12,853,640</b>	<b>\$12,128,238</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$12,853,640	\$12,128,238
2. Combined valuation payroll	11,113,307	11,515,691
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.26%)	(9.06%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Central School District #13J/3859  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Central School District #13J/3859

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Central School District #13J/3859

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Central School District #13J -- #3859**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Central School District #13J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Central School District #13J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Central School District #13J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(15.39%)	(15.39%)	(15.39%)
<b>Net pension contribution rate</b>	<b>9.75%</b>	<b>4.83%</b>	<b>8.93%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>10.31%</b>	<b>5.31%</b>	<b>9.41%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.25%	4.83%	7.54%
July 1, 2013 to June 30, 2015	7.48%	5.58%	8.31%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### **Central School District #13J**

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$21,549,398	\$32,063,618
Allocated pooled OPSRP UAL	906,178	217,441
Side account	22,305,649	21,071,413
Net unfunded pension actuarial accrued liability	149,927	11,209,646
Combined valuation payroll	12,856,736	12,743,905
Net pension UAL as a percentage of payroll	1%	88%
Calculated Side Account Rate Relief	(15.39%)	(14.22%)
Allocated Pooled RHIA UAL	\$269,740	\$330,137

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$21,071,413</b>	<b>\$21,071,413</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,741,708)	(1,741,708)
5. Side account earnings during 2012		2,976,944	2,976,944
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$22,305,649</b>	<b>\$22,305,649</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$22,305,649	\$21,071,413
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$22,305,649</b>	<b>\$21,071,413</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$22,305,649	\$21,071,413
2. Combined valuation payroll	12,856,736	12,743,905
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(15.39%)	(14.22%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Cascade School District #5/4334  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Cascade School District #5/4334

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Cascade School District #5/4334

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

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# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Cascade School District #5 -- #4334

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Cascade School District #5 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Cascade School District #5.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Cascade School District #5***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(16.59%)	(16.59%)	(16.59%)
<b>Net pension contribution rate</b>	<b>8.55%</b>	<b>3.63%</b>	<b>7.73%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>9.11%</b>	<b>4.11%</b>	<b>8.21%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.35%	4.93%	7.64%
July 1, 2013 to June 30, 2015	7.88%	5.98%	8.71%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Cascade School District #5***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$15,122,824	\$24,691,844
Allocated pooled OPSRP UAL	635,933	167,449
Side account	16,868,223	15,772,398
Net unfunded pension actuarial accrued liability	(1,109,466)	9,086,895
Combined valuation payroll	9,022,533	9,813,943
Net pension UAL as a percentage of payroll	(12%)	93%
Calculated Side Account Rate Relief	(16.59%)	(13.82%)
Allocated Pooled RHIA UAL	\$189,297	\$254,235

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$15,772,398</b>	<b>\$15,772,398</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,136,636)	(1,136,636)
5. Side account earnings during 2012		2,233,461	2,233,461
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$16,868,223</b>	<b>\$16,868,223</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$16,868,223	\$15,772,398
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$16,868,223</b>	<b>\$15,772,398</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$16,868,223	\$15,772,398
2. Combined valuation payroll	9,022,533	9,813,943
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(16.59%)	(13.82%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Canby School District/4333  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Canby School District/4333

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Canby School District/4333

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Canby School District -- #4333**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Canby School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Canby School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Canby School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(15.20%)	(15.20%)	(15.20%)
<b>Net pension contribution rate</b>	<b>9.94%</b>	<b>5.02%</b>	<b>9.12%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>10.50%</b>	<b>5.50%</b>	<b>9.60%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.58%	6.16%	8.87%
July 1, 2013 to June 30, 2015	8.79%	6.89%	9.62%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Canby School District***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Allocated pooled T1/T2 UAL	\$40,796,449	\$64,848,000
Allocated pooled OPSRP UAL	1,715,540	439,770
Side account	41,705,311	38,685,812
Net unfunded pension actuarial accrued liability	806,678	26,601,958
Combined valuation payroll	24,339,853	25,774,283
Net pension UAL as a percentage of payroll	3%	103%
Calculated Side Account Rate Relief	(15.20%)	(12.91%)
Allocated Pooled RHIA UAL	\$510,660	\$667,696

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$38,685,812</b>	<b>\$38,685,812</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(2,479,923)	(2,479,923)
5. Side account earnings during 2012		5,501,422	5,501,422
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$41,705,311</b>	<b>\$41,705,311</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$18,388,338	\$17,068,015
Side Account 2	23,316,973	21,617,797
Side Account 3	0	0
<b>Total</b>	<b>\$41,705,311</b>	<b>\$38,685,812</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$41,705,311	\$38,685,812
2. Combined valuation payroll	24,339,853	25,774,283
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(15.20%)	(12.91%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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111 SW Fifth Avenue, Suite 3700  
Portland, OR 97204-3654  
503 227 0634

December 2013

Brookings-Harbor School District #17C/3283  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Brookings-Harbor School District #17C/3283

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Brookings-Harbor School District #17C/3283

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Brookings-Harbor School District #17C -- #3283

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Brookings-Harbor School District #17C to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Brookings-Harbor School District #17C.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Brookings-Harbor School District #17C***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(15.84%)	(15.84%)	(15.84%)
<b>Net pension contribution rate</b>	<b>9.30%</b>	<b>4.38%</b>	<b>8.48%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>9.86%</b>	<b>4.86%</b>	<b>8.96%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.87%	4.45%	7.16%
July 1, 2013 to June 30, 2015	6.67%	4.77%	7.50%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Brookings-Harbor School District #17C***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$10,972,911	\$15,948,002
Allocated pooled OPSRP UAL	461,424	108,152
Side account	11,684,534	11,073,851
Net unfunded pension actuarial accrued liability	(250,199)	4,982,303
Combined valuation payroll	6,546,625	6,338,643
Net pension UAL as a percentage of payroll	(4%)	79%
Calculated Side Account Rate Relief	(15.84%)	(15.03%)
Allocated Pooled RHIA UAL	\$137,351	\$164,206

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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## Side Account Information

### Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$11,073,851</b>	<b>\$11,073,851</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(940,429)	(940,429)
5. Side account earnings during 2012		1,553,111	1,553,111
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$11,684,534</b>	<b>\$11,684,534</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$7,309,807	\$6,927,864
Side Account 2	4,374,727	4,145,987
Side Account 3	0	0
<b>Total</b>	<b>\$11,684,534</b>	<b>\$11,073,851</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$11,684,534	\$11,073,851
2. Combined valuation payroll	6,546,625	6,338,643
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(15.84%)	(15.03%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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503 227 0634

December 2013

Bend-La Pine Public Schools/3291  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

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December 2013  
Bend-La Pine Public Schools/3291

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Bend-La Pine Public Schools/3291

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Bend-La Pine Public Schools -- #3291**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Bend-La Pine Public Schools to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Bend-La Pine Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Bend-La Pine Public Schools***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(9.30%)	(9.30%)	(9.30%)
<b>Net pension contribution rate</b>	<b>15.84%</b>	<b>10.92%</b>	<b>15.02%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>16.40%</b>	<b>11.40%</b>	<b>15.50%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

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# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.69%	9.27%	11.98%
July 1, 2013 to June 30, 2015	13.06%	11.16%	13.89%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Bend-La Pine Public Schools***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$118,666,127	\$175,872,138
Allocated pooled OPSRP UAL	4,990,054	1,192,687
Side account	74,241,386	70,168,255
Net unfunded pension actuarial accrued liability	49,414,795	106,896,570
Combined valuation payroll	70,798,223	69,901,589
Net pension UAL as a percentage of payroll	70%	153%
Calculated Side Account Rate Relief	(9.30%)	(8.64%)
Allocated Pooled RHIA UAL	\$1,485,377	\$1,810,836

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$70,168,255</b>	<b>\$70,168,255</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(3,000)	(3,000)
4. Amount transferred to employer reserves during 2012		(5,814,565)	(5,814,565)
5. Side account earnings during 2012		9,890,696	9,890,696
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$74,241,386</b>	<b>\$74,241,386</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$43,226,617	\$40,857,954
Side Account 2	26,193,329	24,754,103
Side Account 3	4,821,440	4,556,197
<b>Total</b>	<b>\$74,241,386</b>	<b>\$70,168,255</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$74,241,386	\$70,168,255
2. Combined valuation payroll	70,798,223	69,901,589
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.30%)	(8.64%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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December 2013

Beaverton School District/4062  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Beaverton School District/4062

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Beaverton School District/4062

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHOOL DISTRICT POOL

Beaverton School District -- #4062

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Beaverton School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Beaverton School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Beaverton School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(7.28%)	(7.28%)	(7.28%)
<b>Net pension contribution rate</b>	<b>17.86%</b>	<b>12.94%</b>	<b>17.04%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>18.42%</b>	<b>13.42%</b>	<b>17.52%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.43%	11.01%	13.72%
July 1, 2013 to June 30, 2015	15.35%	13.45%	16.18%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Beaverton School District***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Allocated pooled T1/T2 UAL	\$316,662,409	\$499,339,520
Allocated pooled OPSRP UAL	13,316,036	3,386,299
Side account	154,946,402	146,490,920
Net unfunded pension actuarial accrued liability	175,032,043	356,234,899
Combined valuation payroll	188,926,161	198,465,921
Net pension UAL as a percentage of payroll	93%	179%
Calculated Side Account Rate Relief	(7.28%)	(6.35%)
Allocated Pooled RHIA UAL	\$3,963,751	\$5,141,360

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$146,490,920</b>	<b>\$146,490,920</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(12,262,591)	(12,262,591)
5. Side account earnings during 2012		20,719,073	20,719,073
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$154,946,402</b>	<b>\$154,946,402</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$154,946,402	\$146,490,920
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$154,946,402</b>	<b>\$146,490,920</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$154,946,402	\$146,490,920
2. Combined valuation payroll	188,926,161	198,465,921
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.28%)	(6.35%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Banks School District/4035  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).



December 2013  
Banks School District/4035

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Banks School District/4035

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Banks School District -- #4035**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Banks School District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Banks School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Banks School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(5.42%)	(5.42%)	(5.42%)
<b>Net pension contribution rate</b>	<b>19.72%</b>	<b>14.80%</b>	<b>18.90%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>20.28%</b>	<b>15.28%</b>	<b>19.38%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.66%	13.24%	15.95%
July 1, 2013 to June 30, 2015	16.80%	14.90%	17.63%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Banks School District***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$6,216,702	\$9,329,231
Allocated pooled OPSRP UAL	261,420	63,267
Side account	2,266,397	2,111,726
Net unfunded pension actuarial accrued liability	4,211,725	7,280,772
Combined valuation payroll	3,708,990	3,707,967
Net pension UAL as a percentage of payroll	114%	196%
Calculated Side Account Rate Relief	(5.42%)	(4.90%)
Allocated Pooled RHIA UAL	\$77,816	\$96,057

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$2,111,726</b>	<b>\$2,111,726</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(143,702)	(143,702)
5. Side account earnings during 2012		299,373	299,373
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,266,397</b>	<b>\$2,266,397</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$2,266,397	\$2,111,726
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,266,397</b>	<b>\$2,111,726</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$2,266,397	\$2,111,726
2. Combined valuation payroll	3,708,990	3,707,967
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.42%)	(4.90%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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December 2013

Baker School District #5J/3003  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Baker School District #5J/3003

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Baker School District #5J/3003

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Baker School District #5J -- #3003**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Baker School District #5J to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Baker School District #5J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Baker School District #5J***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(11.08%)	(11.08%)	(11.08%)
<b>Net pension contribution rate</b>	<b>14.06%</b>	<b>9.14%</b>	<b>13.24%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>14.62%</b>	<b>9.62%</b>	<b>13.72%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.26%	8.84%	11.55%
July 1, 2013 to June 30, 2015	12.08%	10.18%	12.91%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Baker School District #5J***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$12,855,984	\$20,196,267
Allocated pooled OPSRP UAL	540,610	136,962
Side account	9,579,360	8,975,258
Net unfunded pension actuarial accrued liability	3,817,234	11,357,971
Combined valuation payroll	7,670,098	8,027,145
Net pension UAL as a percentage of payroll	50%	141%
Calculated Side Account Rate Relief	(11.08%)	(9.62%)
Allocated Pooled RHIA UAL	\$160,922	\$207,947

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$8,975,258</b>	<b>\$8,975,258</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(665,538)	(665,538)
5. Side account earnings during 2012		1,270,640	1,270,640
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$9,579,360</b>	<b>\$9,579,360</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$9,579,360	\$8,975,258
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$9,579,360</b>	<b>\$8,975,258</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$9,579,360	\$8,975,258
2. Combined valuation payroll	7,670,098	8,027,145
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(11.08%)	(9.62%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Yamhill-Carlton School District #1/4166  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 School District Pool, OPSRP, and the Retiree Health Insurance Account (RHIA) can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

**If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or [Debra.Hembree@state.or.us](mailto:Debra.Hembree@state.or.us).**

## Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at [www.oregon.gov/PERS/section/financial\\_reports/financials.shtml](http://www.oregon.gov/PERS/section/financial_reports/financials.shtml).

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



December 2013  
Yamhill-Carlton School District #1/4166

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



December 2013  
Yamhill-Carlton School District #1/4166

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matthew R. Larrabee, FSA, EA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott D. Preppernau'.

Scott D. Preppernau, FSA, EA  
Consulting Actuary

**The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2012**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Yamhill-Carlton School District #1 -- #4166**

DECEMBER 2013

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# Executive Summary

Milliman has prepared this report for Yamhill-Carlton School District #1 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the School District Pool, OPSRP, and RHIA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Yamhill-Carlton School District #1.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory Employer Rates Calculated as of December 31, 2012, for Yamhill-Carlton School District #1***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
<b>Pension</b>			
Normal cost rate	12.28%	7.36%	11.46%
Tier 1/Tier 2 UAL rate <sup>1</sup>	12.26%	12.26%	12.26%
OPSRP UAL rate	0.60%	0.60%	0.60%
Side account rate relief <sup>2</sup>	(21.24%)	(21.24%)	(21.24%)
<b>Net pension contribution rate</b>	<b>3.90%</b>	<b>0.00%</b>	<b>3.08%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%
<b>Net retiree healthcare rate</b>	<b>0.56%</b>	<b>0.48%</b>	<b>0.48%</b>
<b>Total net employer contribution rate</b>	<b>4.46%</b>	<b>0.48%</b>	<b>3.56%</b>

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

<sup>1</sup> Includes Multnomah Fire District #10 rate.

<sup>2</sup> The side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium***

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates for the School District Pool first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets.

For comparison, the Pool's funded status as of December 31, 2012 is 80%.

<b>Funded Status as of December 31, 2013</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	21.55%	21.55%
Minimum July 1, 2015 Rate	17.24%	12.93%
Maximum July 1, 2015 Rate	25.86%	30.17%

For individual school districts, the School District Pool rate is adjusted for any rate relief provided by a side account rate offset.

# Executive Summary

## Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

## Pension

We understand that employers participating in the School District Pool and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

### *Contractually Required Contribution Rate*

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.66%	0.24%	2.95%
July 1, 2013 to June 30, 2015	2.08%	0.18%	2.91%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

### ***Contractually Required Contribution Rate***

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%

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# Executive Summary

## Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

District-specific valuation results are only shown for districts with a side account as valuation results for districts without a side account are fully summarized by the School District Pool results, which are shown on the next page.

### ***Yamhill-Carlton School District #1***

	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Allocated pooled T1/T2 UAL	\$8,179,375	\$12,224,620
Allocated pooled OPSRP UAL	343,953	82,902
Side account	11,683,756	11,080,875
Net unfunded pension actuarial accrued liability	(3,160,428)	1,226,647
Combined valuation payroll	4,879,954	4,858,759
Net pension UAL as a percentage of payroll	(65%)	25%
Calculated Side Account Rate Relief	(21.24%)	(19.62%)
Allocated Pooled RHIA UAL	\$102,384	\$125,869

*UAL amounts for the various pools (School District Tier 1/Tier 2 Pension, OPSRP, and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$217.2	\$153.7
Tier 1/Tier 2 valuation payroll	1,769.0	1,880.7
Normal cost rate	12.28%	8.17%
Actuarial accrued liability	\$22,908.0	\$23,973.7
Actuarial asset value	18,329.6	16,964.3
Unfunded actuarial accrued liability	4,578.3	7,009.5
Funded status	80%	71%
Combined valuation payroll	\$2,731.5	\$2,786.0
UAL as a percentage of payroll	168%	252%
UAL rate (includes Multnomah Fire District #10)	12.26%	17.78%
Tier 1/Tier 2 Active Members		
▪ Count	35,602	38,381
▪ Average Age	51.1	50.6
▪ Average Service	16.7	16.0
▪ Average Valuation Payroll	\$49,687	\$49,000
Tier 1/Tier 2 Dormant Members		
▪ Count	15,150	15,003
▪ Average Age	53.9	53.4
▪ Average Monthly Benefit	\$1,052	\$1,006
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	59,968	58,641
▪ Average Age	71.2	71.0
▪ Average Monthly Benefit	\$2,040	\$1,999

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# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
General service normal cost	\$213.5	\$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	\$40.1	\$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	\$1,795.6	\$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2012	December 31, 2011
Normal cost	\$4.4	\$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	\$471.8	\$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	\$8,590.9	\$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

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# Side Account Information

## Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2011</b>	<b>N/A</b>	<b>\$11,080,875</b>	<b>\$11,080,875</b>
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(954,667)	(954,667)
5. Side account earnings during 2012		1,558,548	1,558,548
<b>6. Side account as of December 31, 2012</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$11,683,756</b>	<b>\$11,683,756</b>

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# Side Account Information

## Side Account Balances

	Decembet 31, 2012	December 31, 2011
Side Account 1	\$11,683,756	\$11,080,875
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$11,683,756</b>	<b>\$11,080,875</b>

## Development of Side Account Rate

The rate relief attributable to an employer’s side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	Decembet 31, 2012	December 31, 2011
1. Total side account	\$11,683,756	\$11,080,875
2. Combined valuation payroll	4,879,954	4,858,759
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(21.24%)	(19.62%)

<sup>1</sup> For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

### Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 8.0% in 2013 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

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# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

### ***Changes in Actuarial Methods and Valuation Procedures***

- **Actuarial Cost Method**

The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

### ***Changes in Economic Assumptions***

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

Assumed administrative expenses were reduced from \$6.6 million per year to \$5.5 million per year.

### ***Changes in Demographic Assumptions***

- **Healthy Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first \$60,000 of annual benefit and 0.15% on annual benefits above \$60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

# Glossary

**Actuarial Accrued Liability.** The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

**Actuarial Asset Value.** The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

**Actuarial Assumptions.** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

**Actuarial Cost Method.** Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

**Actuarial Gain or (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

**Agent Multiple-Employer Plan (Agent Plan).** An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

**Annual Required Contribution (ARC).** A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

**Combined Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

**Cost Sharing Multiple-Employer Plan.** A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

**Employer Contribution Rate.** Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

**Funded Status.** The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

# Glossary

**Net Pension Obligation (NPO).** The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal Cost.** The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

**OPSRP Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

**Pre-SLGRP Liability.** The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

**Pre-SLGRP Pooled Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

**Present Value.** Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Rate Collar.** A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

**Required Supplementary Information (RSI).** Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Statement No. 27 of the Governmental Accounting Standards Board (GASB 27).** The accounting standard governing a state or local governmental employer's accounting for pensions.

**Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).** The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

**Tier 1/Tier 2 Valuation Payroll.** Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

**Transition Liability.** The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

**Unfunded Accrued Liability (UAL).** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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