

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

**OREGON PUBLIC EMPLOYEES  
RETIREMENT SYSTEM  
SCHOOL DISTRICT POOL  
Amity School District -- #4306**

September 2014

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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# Executive Summary

Milliman has prepared this report for Amity School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Amity School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(23.06%)	(23.06%)	(23.06%)
<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	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$4,391,502	\$5,955,054
Allocated pooled OPSRP UAL	246,928	250,417
Side account	8,620,212	8,047,431
Net unfunded pension actuarial accrued liability	(3,981,782)	(1,841,960)
Combined valuation payroll	3,492,312	3,552,886
Net pension UAL as a percentage of payroll	(114%)	(52%)
Calculated Side Account Rate Relief	(23.06%)	(20.09%)
Allocated Pooled RHIA UAL	\$48,337	\$74,541

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$8,047,431</b>	<b>\$8,047,431</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(662,582)	(662,582)
5. Side account earnings during 2013		1,236,363	1,236,363
<b>6. Side account as of December 31, 2013</b>		<b>\$8,620,212</b>	<b>\$8,620,212</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$8,620,212	\$8,047,431
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,620,212</b>	<b>\$8,047,431</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$8,620,212	\$8,047,431
2. Combined valuation payroll	3,492,312	3,552,886
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(23.06%)	(20.09%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

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**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.**

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- A brief summary of methods and assumptions, and
- A brief summary of any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary

# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Baker School District #5J -- #3003**

September 2014

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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# Executive Summary

Milliman has prepared this report for Baker School District #5J to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Baker School District #5J***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(12.14%)	(12.14%)	(12.14%)
<b>Net pension contribution rate</b>	<b>9.66%</b>	<b>5.05%</b>	<b>9.16%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>10.19%</b>	<b>5.50%</b>	<b>9.61%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$9,983,919	\$12,855,984
Allocated pooled OPSRP UAL	561,381	540,610
Side account	10,312,991	9,579,360
Net unfunded pension actuarial accrued liability	232,309	3,817,234
Combined valuation payroll	7,939,643	7,670,098
Net pension UAL as a percentage of payroll	3%	50%
Calculated Side Account Rate Relief	(12.14%)	(11.08%)
Allocated Pooled RHIA UAL	\$109,893	\$160,922

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$9,579,360</b>	<b>\$9,579,360</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(740,997)	(740,997)
5. Side account earnings during 2013		1,475,629	1,475,629
<b>6. Side account as of December 31, 2013</b>		<b>\$10,312,991</b>	<b>\$10,312,991</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$10,312,991	\$9,579,360
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$10,312,991</b>	<b>\$9,579,360</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$10,312,991	\$9,579,360
2. Combined valuation payroll	7,939,643	7,670,098
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(12.14%)	(11.08%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Banks School District -- #4035**

September 2014

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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# Executive Summary

Milliman has prepared this report for Banks School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Banks School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(6.06%)	(6.06%)	(6.06%)
<b>Net pension contribution rate</b>	<b>15.74%</b>	<b>11.13%</b>	<b>15.24%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>16.27%</b>	<b>11.58%</b>	<b>15.69%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Allocated pooled T1/T2 UAL	\$4,743,576	\$6,216,702
Allocated pooled OPSRP UAL	266,724	261,420
Side account	2,445,317	2,266,397
Net unfunded pension actuarial accrued liability	2,564,983	4,211,725
Combined valuation payroll	3,772,296	3,708,990
Net pension UAL as a percentage of payroll	68%	114%
Calculated Side Account Rate Relief	(6.06%)	(5.42%)
Allocated Pooled RHIA UAL	\$52,213	\$77,816

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$2,266,397</b>	<b>\$2,266,397</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(168,220)	(168,220)
5. Side account earnings during 2013		348,141	348,141
<b>6. Side account as of December 31, 2013</b>		<b>\$2,445,317</b>	<b>\$2,445,317</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$2,445,317	\$2,266,397
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,445,317</b>	<b>\$2,266,397</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$2,445,317	\$2,266,397
2. Combined valuation payroll	3,772,296	3,708,990
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(6.06%)	(5.42%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Beaverton School District -- #4062**

September 2014

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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# Executive Summary

Milliman has prepared this report for Beaverton School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Beaverton School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(8.36%)	(8.36%)	(8.36%)
<b>Net pension contribution rate</b>	<b>13.44%</b>	<b>8.83%</b>	<b>12.94%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>13.97%</b>	<b>9.28%</b>	<b>13.39%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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**

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$236,101,670	\$316,662,409
Allocated pooled OPSRP UAL	13,275,650	13,316,036
Side account	168,018,164	154,946,402
Net unfunded pension actuarial accrued liability	81,359,156	175,032,043
Combined valuation payroll	187,758,232	188,926,161
Net pension UAL as a percentage of payroll	43%	93%
Calculated Side Account Rate Relief	(8.36%)	(7.28%)
Allocated Pooled RHIA UAL	\$2,598,775	\$3,963,751

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$154,946,402</b>	<b>\$154,946,402</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(10,841,855)	(10,841,855)
5. Side account earnings during 2013		23,914,617	23,914,617
<b>6. Side account as of December 31, 2013</b>		<b>\$168,018,164</b>	<b>\$168,018,164</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$168,018,164	\$154,946,402
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$168,018,164</b>	<b>\$154,946,402</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$168,018,164	\$154,946,402
2. Combined valuation payroll	187,758,232	188,926,161
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.36%)	(7.28%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

Bend-La Pine Public Schools -- #3291

September 2014

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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# Executive Summary

Milliman has prepared this report for Bend-La Pine Public Schools to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Bend-La Pine Public Schools***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(9.96%)	(9.96%)	(9.96%)
<b>Net pension contribution rate</b>	<b>11.84%</b>	<b>7.23%</b>	<b>11.34%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>12.37%</b>	<b>7.68%</b>	<b>11.79%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$93,821,259	\$118,666,127
Allocated pooled OPSRP UAL	5,275,432	4,990,054
Side account	79,542,008	74,241,386
Net unfunded pension actuarial accrued liability	19,554,683	49,414,795
Combined valuation payroll	74,610,712	70,798,223
Net pension UAL as a percentage of payroll	26%	70%
Calculated Side Account Rate Relief	(9.96%)	(9.30%)
Allocated Pooled RHIA UAL	\$1,032,692	\$1,485,377

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$74,241,386</b>	<b>\$74,241,386</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(3,000)	(3,000)
4. Amount transferred to employer reserves during 2013		(6,079,739)	(6,079,739)
5. Side account earnings during 2013		11,383,362	11,383,362
<b>6. Side account as of December 31, 2013</b>		<b>\$79,542,008</b>	<b>\$79,542,008</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

## Side Account Information

### Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$46,310,762	\$43,226,617
Side Account 2	28,064,947	26,193,329
Side Account 3	5,166,299	4,821,440
<b>Total</b>	<b>\$79,542,008</b>	<b>\$74,241,386</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$79,542,008	\$74,241,386
2. Combined valuation payroll	74,610,712	70,798,223
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.96%)	(9.30%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Brookings-Harbor School District #17C -- #3283**

September 2014

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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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Brookings-Harbor School District #17C***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(17.69%)	(17.69%)	(17.69%)
<b>Net pension contribution rate</b>	<b>4.11%</b>	<b>0.00%</b>	<b>3.61%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>4.64%</b>	<b>0.45%</b>	<b>4.06%</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%.

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Allocated pooled T1/T2 UAL	\$8,333,899	\$10,972,911
Allocated pooled OPSRP UAL	468,603	461,424
Side account	12,549,501	11,684,534
Net unfunded pension actuarial accrued liability	(3,746,999)	(250,199)
Combined valuation payroll	6,627,476	6,546,625
Net pension UAL as a percentage of payroll	(57%)	(4%)
Calculated Side Account Rate Relief	(17.69%)	(15.84%)
Allocated Pooled RHIA UAL	\$91,731	\$137,351

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$11,684,534</b>	<b>\$11,684,534</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2013		(929,017)	(929,017)
5. Side account earnings during 2013		1,795,985	1,795,985
<b>6. Side account as of December 31, 2013</b>		<b>\$12,549,501</b>	<b>\$12,549,501</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

## Side Account Information

### Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$7,851,023	\$7,309,807
Side Account 2	4,698,478	4,374,727
Side Account 3	0	0
<b>Total</b>	<b>\$12,549,501</b>	<b>\$11,684,534</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$12,549,501	\$11,684,534
2. Combined valuation payroll	6,627,476	6,546,625
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(17.69%)	(15.84%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

**OREGON PUBLIC EMPLOYEES  
RETIREMENT SYSTEM  
SCHOOL DISTRICT POOL  
Canby School District -- #4333**

September 2014

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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# Executive Summary

Milliman has prepared this report for Canby School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Canby School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(19.84%)	(19.84%)	(19.84%)
<b>Net pension contribution rate</b>	<b>1.96%</b>	<b>0.00%</b>	<b>1.46%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>2.49%</b>	<b>0.45%</b>	<b>1.91%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$26,998,359	\$40,796,449
Allocated pooled OPSRP UAL	1,518,078	1,715,540
Side account	45,589,572	41,705,311
Net unfunded pension actuarial accrued liability	(17,073,135)	806,678
Combined valuation payroll	21,470,260	24,339,853
Net pension UAL as a percentage of payroll	(80%)	3%
Calculated Side Account Rate Relief	(19.84%)	(15.20%)
Allocated Pooled RHIA UAL	\$297,171	\$510,660

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$41,705,311</b>	<b>\$41,705,311</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2013		(2,574,074)	(2,574,074)
5. Side account earnings during 2013		6,460,334	6,460,334
<b>6. Side account as of December 31, 2013</b>		<b>\$45,589,572</b>	<b>\$45,589,572</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

## Side Account Information

### Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$20,090,836	\$18,388,338
Side Account 2	25,498,736	23,316,973
Side Account 3	0	0
<b>Total</b>	<b>\$45,589,572</b>	<b>\$41,705,311</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$45,589,572	\$41,705,311
2. Combined valuation payroll	21,470,260	24,339,853
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(19.84%)	(15.20%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Cascade School District #5 -- #4334**

**September 2014**

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# Executive Summary

Milliman has prepared this report for Cascade School District #5 to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Cascade School District #5***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(18.52%)	(18.52%)	(18.52%)
<b>Net pension contribution rate</b>	<b>3.28%</b>	<b>0.00%</b>	<b>2.78%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>3.81%</b>	<b>0.45%</b>	<b>3.23%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$11,432,314	\$15,122,824
Allocated pooled OPSRP UAL	642,822	635,933
Side account	18,023,638	16,868,223
Net unfunded pension actuarial accrued liability	(5,948,502)	(1,109,466)
Combined valuation payroll	9,091,469	9,022,533
Net pension UAL as a percentage of payroll	(65%)	(12%)
Calculated Side Account Rate Relief	(18.52%)	(16.59%)
Allocated Pooled RHIA UAL	\$125,836	\$189,297

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$16,868,223</b>	<b>\$16,868,223</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(1,425,747)	(1,425,747)
5. Side account earnings during 2013		2,582,162	2,582,162
<b>6. Side account as of December 31, 2013</b>		<b>\$18,023,638</b>	<b>\$18,023,638</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$18,023,638	\$16,868,223
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$18,023,638</b>	<b>\$16,868,223</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$18,023,638	\$16,868,223
2. Combined valuation payroll	9,091,469	9,022,533
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(18.52%)	(16.59%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Central School District #13J -- #3859**

**September 2014**

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# Executive Summary

Milliman has prepared this report for Central School District #13J to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Central School District #13J***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(16.85%)	(16.85%)	(16.85%)
<b>Net pension contribution rate</b>	<b>4.95%</b>	<b>0.34%</b>	<b>4.45%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>5.48%</b>	<b>0.79%</b>	<b>4.90%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$16,852,156	\$21,549,398
Allocated pooled OPSRP UAL	947,572	906,178
Side account	24,163,005	22,305,649
Net unfunded pension actuarial accrued liability	(6,363,277)	149,927
Combined valuation payroll	13,401,561	12,856,736
Net pension UAL as a percentage of payroll	(47%)	1%
Calculated Side Account Rate Relief	(16.85%)	(15.39%)
Allocated Pooled RHIA UAL	\$185,492	\$269,740

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$22,305,649</b>	<b>\$22,305,649</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(1,585,865)	(1,585,865)
5. Side account earnings during 2013		3,444,221	3,444,221
<b>6. Side account as of December 31, 2013</b>		<b>\$24,163,005</b>	<b>\$24,163,005</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$24,163,005	\$22,305,649
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$24,163,005</b>	<b>\$22,305,649</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$24,163,005	\$22,305,649
2. Combined valuation payroll	13,401,561	12,856,736
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(16.85%)	(15.39%)

<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, 2013, 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 is 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>	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.

### 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**City of Phoenix School District -- #3414**

September 2014

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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# Executive Summary

Milliman has prepared this report for City of Phoenix School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for City of Phoenix School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(12.27%)	(12.27%)	(12.27%)
<b>Net pension contribution rate</b>	<b>9.53%</b>	<b>4.92%</b>	<b>9.03%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>10.06%</b>	<b>5.37%</b>	<b>9.48%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$13,269,493	\$18,627,206
Allocated pooled OPSRP UAL	746,124	783,296
Side account	13,853,368	12,853,640
Net unfunded pension actuarial accrued liability	162,249	6,556,862
Combined valuation payroll	10,552,473	11,113,307
Net pension UAL as a percentage of payroll	2%	59%
Calculated Side Account Rate Relief	(12.27%)	(10.26%)
Allocated Pooled RHIA UAL	\$146,058	\$233,162

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$12,853,640</b>	<b>\$12,853,640</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(974,125)	(974,125)
5. Side account earnings during 2013		1,974,853	1,974,853
<b>6. Side account as of December 31, 2013</b>		<b>\$13,853,368</b>	<b>\$13,853,368</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

## Side Account Information

### Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$13,853,368	\$12,853,640
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$13,853,368</b>	<b>\$12,853,640</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$13,853,368	\$12,853,640
2. Combined valuation payroll	10,552,473	11,113,307
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.27%)	(10.26%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Clackamas Education Service District -- #4259**

September 2014

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# Executive Summary

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

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Clackamas Education Service District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(10.91%)	(10.91%)	(10.91%)
<b>Net pension contribution rate</b>	<b>10.89%</b>	<b>6.28%</b>	<b>10.39%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>11.42%</b>	<b>6.73%</b>	<b>10.84%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Allocated pooled T1/T2 UAL	\$18,515,337	\$23,509,523
Allocated pooled OPSRP UAL	1,041,090	988,604
Side account	17,192,302	15,940,466
Net unfunded pension actuarial accrued liability	2,364,125	8,557,661
Combined valuation payroll	14,724,195	14,026,180
Net pension UAL as a percentage of payroll	16%	61%
Calculated Side Account Rate Relief	(10.91%)	(10.08%)
Allocated Pooled RHIA UAL	\$203,799	\$294,275

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$15,940,466</b>	<b>\$15,940,466</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(1,201,502)	(1,201,502)
5. Side account earnings during 2013		2,454,338	2,454,338
<b>6. Side account as of December 31, 2013</b>		<b>\$17,192,302</b>	<b>\$17,192,302</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$17,192,302	\$15,940,466
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$17,192,302</b>	<b>\$15,940,466</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$17,192,302	\$15,940,466
2. Combined valuation payroll	14,724,195	14,026,180
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(10.91%)	(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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Clatsop County School District #1C -- #3179**

September 2014

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# Executive Summary

Milliman has prepared this report for Clatsop County School District #1C to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Clatsop County School District #1C***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(25.57%)	(25.57%)	(25.57%)
<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	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Allocated pooled T1/T2 UAL	\$10,666,709	\$14,241,939
Allocated pooled OPSRP UAL	599,773	598,891
Side account	23,218,482	21,683,582
Net unfunded pension actuarial accrued liability	(11,952,000)	(6,842,752)
Combined valuation payroll	8,482,627	8,496,982
Net pension UAL as a percentage of payroll	(141%)	(81%)
Calculated Side Account Rate Relief	(25.57%)	(22.64%)
Allocated Pooled RHIA UAL	\$117,409	\$178,270

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$21,683,582</b>	<b>\$21,683,582</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(1,799,041)	(1,799,041)
5. Side account earnings during 2013		3,334,942	3,334,942
<b>6. Side account as of December 31, 2013</b>		<b>\$23,218,482</b>	<b>\$23,218,482</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$23,218,482	\$21,683,582
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$23,218,482</b>	<b>\$21,683,582</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$23,218,482	\$21,683,582
2. Combined valuation payroll	8,482,627	8,496,982
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(25.57%)	(22.64%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Coos Bay School District #9 -- #3242**

September 2014

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# Executive Summary

Milliman has prepared this report for Coos Bay School District #9 to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Coos Bay School District #9***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(7.03%)	(7.03%)	(7.03%)
<b>Net pension contribution rate</b>	<b>14.77%</b>	<b>10.16%</b>	<b>14.27%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>15.30%</b>	<b>10.61%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$14,906,058	\$19,623,894
Allocated pooled OPSRP UAL	838,146	825,208
Side account	8,918,247	8,229,932
Net unfunded pension actuarial accrued liability	6,825,957	12,219,170
Combined valuation payroll	11,853,940	11,707,948
Net pension UAL as a percentage of payroll	58%	104%
Calculated Side Account Rate Relief	(7.03%)	(6.24%)
Allocated Pooled RHIA UAL	\$164,071	\$245,638

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
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Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
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Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$8,229,932</b>	<b>\$8,229,932</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(578,767)	(578,767)
5. Side account earnings during 2013		1,268,082	1,268,082
<b>6. Side account as of December 31, 2013</b>		<b>\$8,918,247</b>	<b>\$8,918,247</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$8,918,247	\$8,229,932
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,918,247</b>	<b>\$8,229,932</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$8,918,247	\$8,229,932
2. Combined valuation payroll	11,853,940	11,707,948
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(7.03%)	(6.24%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

Corvallis School District #509J -- #3039

September 2014

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# Executive Summary

Milliman has prepared this report for Corvallis School District #509J to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Corvallis School District #509J***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(12.90%)	(12.90%)	(12.90%)
<b>Net pension contribution rate</b>	<b>8.90%</b>	<b>4.29%</b>	<b>8.40%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>9.43%</b>	<b>4.74%</b>	<b>8.85%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$35,759,428	\$49,536,943
Allocated pooled OPSRP UAL	2,010,700	2,083,088
Side account	39,861,515	37,008,515
Net unfunded pension actuarial accrued liability	(2,091,387)	14,611,516
Combined valuation payroll	28,437,440	29,554,580
Net pension UAL as a percentage of payroll	(7%)	49%
Calculated Side Account Rate Relief	(12.90%)	(10.96%)
Allocated Pooled RHIA UAL	\$393,605	\$620,068

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$37,008,515</b>	<b>\$37,008,515</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(3,000)	(3,000)
4. Amount transferred to employer reserves during 2013		(2,843,681)	(2,843,681)
5. Side account earnings during 2013		5,699,681	5,699,681
<b>6. Side account as of December 31, 2013</b>		<b>\$39,861,515</b>	<b>\$39,861,515</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$29,354,308	\$27,277,073
Side Account 2	4,159,698	3,867,291
Side Account 3	6,347,509	5,864,151
<b>Total</b>	<b>\$39,861,515</b>	<b>\$37,008,515</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$39,861,515	\$37,008,515
2. Combined valuation payroll	28,437,440	29,554,580
3. Amortization factor	10.881	11.442
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.90%)	(10.96%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
Creswell School District #40/3502

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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Creswell School District #40 -- #3502**

**September 2014**

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# Executive Summary

Milliman has prepared this report for Creswell School District #40 to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Creswell School District #40***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(5.00%)	(5.00%)	(5.00%)
<b>Net pension contribution rate</b>	<b>16.80%</b>	<b>12.19%</b>	<b>16.30%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>17.33%</b>	<b>12.64%</b>	<b>16.75%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$7,023,903	\$9,218,535
Allocated pooled OPSRP UAL	394,944	387,650
Side account	2,987,741	2,777,132
Net unfunded pension actuarial accrued liability	4,431,106	6,829,053
Combined valuation payroll	5,585,711	5,499,934
Net pension UAL as a percentage of payroll	79%	124%
Calculated Side Account Rate Relief	(5.00%)	(4.48%)
Allocated Pooled RHIA UAL	\$77,312	\$115,391

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$2,777,132</b>	<b>\$2,777,132</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(215,419)	(215,419)
5. Side account earnings during 2013		427,028	427,028
<b>6. Side account as of December 31, 2013</b>		<b>\$2,987,741</b>	<b>\$2,987,741</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$2,987,741	\$2,777,132
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,987,741</b>	<b>\$2,777,132</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$2,987,741	\$2,777,132
2. Combined valuation payroll	5,585,711	5,499,934
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.00%)	(4.48%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Crook County School District -- #3274**

September 2014

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# Executive Summary

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

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Crook County School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(20.76%)	(20.76%)	(20.76%)
<b>Net pension contribution rate</b>	<b>1.04%</b>	<b>0.00%</b>	<b>0.54%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>1.57%</b>	<b>0.45%</b>	<b>0.99%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$16,908,069	\$21,138,551
Allocated pooled OPSRP UAL	950,716	888,902
Side account	29,863,022	27,909,426
Net unfunded pension actuarial accrued liability	(12,004,237)	(5,881,973)
Combined valuation payroll	13,446,026	12,611,618
Net pension UAL as a percentage of payroll	(89%)	(47%)
Calculated Side Account Rate Relief	(20.76%)	(19.63%)
Allocated Pooled RHIA UAL	\$186,107	\$264,597

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$27,909,426</b>	<b>\$27,909,426</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2013		(2,317,337)	(2,317,337)
5. Side account earnings during 2013		4,272,932	4,272,932
<b>6. Side account as of December 31, 2013</b>		<b>\$29,863,022</b>	<b>\$29,863,022</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$13,017,573	\$12,167,913
Side Account 2	16,845,448	15,741,514
Side Account 3	0	0
<b>Total</b>	<b>\$29,863,022</b>	<b>\$27,909,426</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$29,863,022	\$27,909,426
2. Combined valuation payroll	13,446,026	12,611,618
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(20.76%)	(19.63%)

<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, 2013, 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 is 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>	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.

### 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**David Douglas School District -- #3843**

**September 2014**

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# Executive Summary

Milliman has prepared this report for David Douglas School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for David Douglas School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(3.86%)	(3.86%)	(3.86%)
<b>Net pension contribution rate</b>	<b>17.94%</b>	<b>13.33%</b>	<b>17.44%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>18.47%</b>	<b>13.78%</b>	<b>17.89%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$76,856,945	\$92,900,711
Allocated pooled OPSRP UAL	4,321,553	3,906,587
Side account	25,248,774	23,452,655
Net unfunded pension actuarial accrued liability	55,929,724	73,354,643
Combined valuation payroll	61,119,958	55,426,139
Net pension UAL as a percentage of payroll	92%	132%
Calculated Side Account Rate Relief	(3.86%)	(3.75%)
Allocated Pooled RHIA UAL	\$845,966	\$1,162,864

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$23,452,655</b>	<b>\$23,452,655</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(1,802,020)	(1,802,020)
5. Side account earnings during 2013		3,599,139	3,599,139
<b>6. Side account as of December 31, 2013</b>		<b>\$25,248,774</b>	<b>\$25,248,774</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$25,248,774	\$23,452,655
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$25,248,774</b>	<b>\$23,452,655</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$25,248,774	\$23,452,655
2. Combined valuation payroll	61,119,958	55,426,139
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(3.86%)	(3.75%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Dayton Public Schools -- #4291**

September 2014

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# Executive Summary

Milliman has prepared this report for Dayton Public Schools to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Dayton Public Schools***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(17.86%)	(17.86%)	(17.86%)
<b>Net pension contribution rate</b>	<b>3.94%</b>	<b>0.00%</b>	<b>3.44%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>4.47%</b>	<b>0.45%</b>	<b>3.89%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Allocated pooled T1/T2 UAL	\$5,796,117	\$8,650,368
Allocated pooled OPSRP UAL	325,907	363,758
Side account	8,811,057	8,234,620
Net unfunded pension actuarial accrued liability	(2,689,033)	779,506
Combined valuation payroll	4,609,322	5,160,956
Net pension UAL as a percentage of payroll	(58%)	15%
Calculated Side Account Rate Relief	(17.86%)	(14.16%)
Allocated Pooled RHIA UAL	\$63,798	\$108,279

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$8,234,620</b>	<b>\$8,234,620</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2013		(684,492)	(684,492)
5. Side account earnings during 2013		1,262,929	1,262,929
<b>6. Side account as of December 31, 2013</b>		<b>\$8,811,057</b>	<b>\$8,811,057</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

## Side Account Information

### Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$3,740,177	\$3,494,246
Side Account 2	5,070,880	4,740,374
Side Account 3	0	0
<b>Total</b>	<b>\$8,811,057</b>	<b>\$8,234,620</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$8,811,057	\$8,234,620
2. Combined valuation payroll	4,609,322	5,160,956
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(17.86%)	(14.16%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Douglas Education Service District -- #4237**

September 2014

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# Executive Summary

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

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Douglas Education Service District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(5.23%)	(5.23%)	(5.23%)
<b>Net pension contribution rate</b>	<b>16.57%</b>	<b>11.96%</b>	<b>16.07%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>17.10%</b>	<b>12.41%</b>	<b>16.52%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$10,213,752	\$13,707,864
Allocated pooled OPSRP UAL	574,304	576,432
Side account	4,548,577	4,204,114
Net unfunded pension actuarial accrued liability	6,239,479	10,080,182
Combined valuation payroll	8,122,416	8,178,344
Net pension UAL as a percentage of payroll	77%	123%
Calculated Side Account Rate Relief	(5.23%)	(4.56%)
Allocated Pooled RHIA UAL	\$112,423	\$171,585

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$4,204,114</b>	<b>\$4,204,114</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(303,074)	(303,074)
5. Side account earnings during 2013		648,538	648,538
<b>6. Side account as of December 31, 2013</b>		<b>\$4,548,577</b>	<b>\$4,548,577</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$4,548,577	\$4,204,114
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$4,548,577</b>	<b>\$4,204,114</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$4,548,577	\$4,204,114
2. Combined valuation payroll	8,122,416	8,178,344
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.23%)	(4.56%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Echo School District -- #3927**

**September 2014**

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# Executive Summary

Milliman has prepared this report for Echo School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Echo School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(12.91%)	(12.91%)	(12.91%)
<b>Net pension contribution rate</b>	<b>8.89%</b>	<b>4.28%</b>	<b>8.39%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>9.42%</b>	<b>4.73%</b>	<b>8.84%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$1,709,787	\$2,428,540
Allocated pooled OPSRP UAL	96,139	102,123
Side account	1,878,834	1,768,014
Net unfunded pension actuarial accrued liability	(72,908)	762,649
Combined valuation payroll	1,359,696	1,448,908
Net pension UAL as a percentage of payroll	(5%)	53%
Calculated Side Account Rate Relief	(12.91%)	(10.83%)
Allocated Pooled RHIA UAL	\$18,820	\$30,399

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$1,768,014</b>	<b>\$1,768,014</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(156,054)	(156,054)
5. Side account earnings during 2013		267,873	267,873
<b>6. Side account as of December 31, 2013</b>		<b>\$1,878,834</b>	<b>\$1,878,834</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$1,878,834	\$1,768,014
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$1,878,834</b>	<b>\$1,768,014</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$1,878,834	\$1,768,014
2. Combined valuation payroll	1,359,696	1,448,908
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.91%)	(10.83%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Estacada School District #108 -- #4323**

**September 2014**

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# Executive Summary

Milliman has prepared this report for Estacada School District #108 to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Estacada School District #108***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(12.71%)	(12.71%)	(12.71%)
<b>Net pension contribution rate</b>	<b>9.09%</b>	<b>4.48%</b>	<b>8.59%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>9.62%</b>	<b>4.93%</b>	<b>9.04%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Allocated pooled T1/T2 UAL	\$10,855,171	\$16,993,679
Allocated pooled OPSRP UAL	610,370	714,605
Side account	11,743,627	10,816,311
Net unfunded pension actuarial accrued liability	(278,086)	6,891,973
Combined valuation payroll	8,632,500	10,138,717
Net pension UAL as a percentage of payroll	(3%)	68%
Calculated Side Account Rate Relief	(12.71%)	(9.46%)
Allocated Pooled RHIA UAL	\$119,483	\$212,715

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$10,816,311</b>	<b>\$10,816,311</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(738,460)	(738,460)
5. Side account earnings during 2013		1,666,776	1,666,776
<b>6. Side account as of December 31, 2013</b>		<b>\$11,743,627</b>	<b>\$11,743,627</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$11,743,627	\$10,816,311
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$11,743,627</b>	<b>\$10,816,311</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$11,743,627	\$10,816,311
2. Combined valuation payroll	8,632,500	10,138,717
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.71%)	(9.46%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary

# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Eugene School District 4J -- #3473**

September 2014

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# Executive Summary

Milliman has prepared this report for Eugene School District 4J to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Eugene School District 4J***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(5.98%)	(5.98%)	(5.98%)
<b>Net pension contribution rate</b>	<b>15.82%</b>	<b>11.21%</b>	<b>15.32%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>16.35%</b>	<b>11.66%</b>	<b>15.77%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$98,779,071	\$133,062,386
Allocated pooled OPSRP UAL	5,554,202	5,595,434
Side account	50,264,555	46,485,504
Net unfunded pension actuarial accrued liability	54,068,718	92,172,316
Combined valuation payroll	78,553,378	79,387,275
Net pension UAL as a percentage of payroll	69%	116%
Calculated Side Account Rate Relief	(5.98%)	(5.19%)
Allocated Pooled RHIA UAL	\$1,087,263	\$1,665,579

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$46,485,504</b>	<b>\$46,485,504</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(3,382,612)	(3,382,612)
5. Side account earnings during 2013		7,162,664	7,162,664
<b>6. Side account as of December 31, 2013</b>		<b>\$50,264,555</b>	<b>\$50,264,555</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$50,264,555	\$46,485,504
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$50,264,555</b>	<b>\$46,485,504</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$50,264,555	\$46,485,504
2. Combined valuation payroll	78,553,378	79,387,275
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.98%)	(5.19%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

Falls City School District/3887  
Oregon Public Employees Retirement System

Dear Sir or Madam:

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**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.**

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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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

**OREGON PUBLIC EMPLOYEES  
RETIREMENT SYSTEM  
SCHOOL DISTRICT POOL  
Falls City School District -- #3887**

September 2014

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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# Executive Summary

Milliman has prepared this report for Falls City School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Falls City School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(23.89%)	(23.89%)	(23.89%)
<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	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$1,128,794	\$1,483,999
Allocated pooled OPSRP UAL	63,470	62,404
Side account	2,294,820	2,118,405
Net unfunded pension actuarial accrued liability	(1,102,556)	(572,002)
Combined valuation payroll	897,666	885,379
Net pension UAL as a percentage of payroll	(123%)	(65%)
Calculated Side Account Rate Relief	(23.89%)	(21.23%)
Allocated Pooled RHIA UAL	\$12,425	\$18,576

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$2,118,405</b>	<b>\$2,118,405</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(149,142)	(149,142)
5. Side account earnings during 2013		326,556	326,556
<b>6. Side account as of December 31, 2013</b>		<b>\$2,294,820</b>	<b>\$2,294,820</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$2,294,820	\$2,118,405
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,294,820</b>	<b>\$2,118,405</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$2,294,820	\$2,118,405
2. Combined valuation payroll	897,666	885,379
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(23.89%)	(21.23%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the the benefit provisions in effect as of December 31, 2013. 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.**

## 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary



# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Fern Ridge School District -- #3494**

September 2014

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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# Executive Summary

Milliman has prepared this report for Fern Ridge School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Fern Ridge School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(14.05%)	(14.05%)	(14.05%)
<b>Net pension contribution rate</b>	<b>7.75%</b>	<b>3.14%</b>	<b>7.25%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>8.28%</b>	<b>3.59%</b>	<b>7.70%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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, 2013	December 31, 2012
Allocated pooled T1/T2 UAL	\$6,806,212	\$9,408,003
Allocated pooled OPSRP UAL	382,703	395,618
Side account	8,139,327	7,560,898
Net unfunded pension actuarial accrued liability	(950,412)	2,242,723
Combined valuation payroll	5,412,593	5,612,974
Net pension UAL as a percentage of payroll	(18%)	40%
Calculated Side Account Rate Relief	(14.05%)	(11.95%)
Allocated Pooled RHIA UAL	\$74,916	\$117,763

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$7,560,898</b>	<b>\$7,560,898</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(577,449)	(577,449)
5. Side account earnings during 2013		1,156,878	1,156,878
<b>6. Side account as of December 31, 2013</b>		<b>\$8,139,327</b>	<b>\$8,139,327</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$8,139,327	\$7,560,898
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,139,327</b>	<b>\$7,560,898</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$8,139,327	\$7,560,898
2. Combined valuation payroll	5,412,593	5,612,974
3. Amortization factor	10.703	11.272
4. Total side account rate ( $-1. \div 2. \div 3.$ ) <sup>1</sup>	(14.05%)	(11.95%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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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.

September 2014

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, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the benefit provisions in effect as of December 31, 2013. 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 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 any 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).

September 2014  
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 determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 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 Statement No. 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.

September 2014  
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.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

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. Prepperneau, FSA, EA  
Consulting Actuary

# **ACTUARIAL VALUATION REPORT**

## **DECEMBER 31, 2013**

### **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Forest Grove School District -- #4313**

**September 2014**

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# Executive Summary

Milliman has prepared this report for Forest Grove School District to:

- Provide summary December 31, 2013 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 employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 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, 2013 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 effective July 1, 2015 through June 30, 2017 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.

### ***Employer Rates Effective July 1, 2015 for Forest Grove School District***

	Payroll		
	OPSRP		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	11.94%	7.33%	11.44%
Tier 1/Tier 2 UAL rate <sup>1</sup>	9.25%	9.25%	9.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief <sup>2</sup>	(9.28%)	(9.28%)	(9.28%)
<b>Net pension contribution rate</b>	<b>12.52%</b>	<b>7.91%</b>	<b>12.02%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
<b>Net retiree healthcare rate</b>	<b>0.53%</b>	<b>0.45%</b>	<b>0.45%</b>
<b>Total net employer contribution rate</b>	<b>13.05%</b>	<b>8.36%</b>	<b>12.47%</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 2017 to June 2019 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, 2017, which will depend on the funded status as of December 31, 2015. 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, 2013 is 85%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum July 1, 2017 Rate	16.95%	12.71%
Maximum July 1, 2017 Rate	25.43%	29.67%

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.

### ***Pension***

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs 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 their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

# Executive Summary

## Accounting Information (continued)

### ***Retiree Healthcare***

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this 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		
	OPSRP		
	Tier 1 / Tier 2	General Service	Police and Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

# 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***

	<b>Actuarial Valuation as of</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Allocated pooled T1/T2 UAL	\$32,739,763	\$44,334,996
Allocated pooled OPSRP UAL	1,840,909	1,864,340
Side account	25,848,530	23,911,974
Net unfunded pension actuarial accrued liability	8,732,142	22,287,362
Combined valuation payroll	26,036,072	26,451,010
Net pension UAL as a percentage of payroll	34%	84%
Calculated Side Account Rate Relief	(9.28%)	(8.02%)
Allocated Pooled RHIA UAL	\$360,367	\$554,953

*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. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.*

# Executive Summary

## Principal Valuation Results (continued)

### ***School District Pool***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$198.6	\$217.2
Tier 1/Tier 2 valuation payroll	1,663.0	1,769.0
Normal cost rate	11.94%	12.28%
Actuarial accrued liability	\$23,392.6	\$22,908.0
Actuarial asset value	19,967.8	18,329.6
Unfunded actuarial accrued liability	3,424.8	4,578.3
Funded status	85%	80%
Combined valuation payroll	\$2,723.5	\$2,731.5
UAL as a percentage of payroll	126%	168%
UAL rate (includes Multnomah Fire District #10)	9.25%	12.26%
 Tier 1/Tier 2 Active Members		
■ Count	32,499	35,602
■ Average Age	51.4	51.1
■ Average Service	17.2	16.7
■ Average Valuation Payroll	\$51,171	\$49,687
 Tier 1/Tier 2 Dormant Members		
■ Count	13,923	15,150
■ Average Age	53.8	53.9
■ Average Monthly Benefit	\$1,007	\$1,052
 Tier 1/Tier 2 Retirees and Beneficiaries		
■ Count	62,324	59,968
■ Average Age	71.3	71.2
■ Average Monthly Benefit	\$2,071	\$2,040

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# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

## 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, 2012</b>	N/A	<b>\$23,911,974</b>	<b>\$23,911,974</b>
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(1,749,762)	(1,749,762)
5. Side account earnings during 2013		3,687,319	3,687,319
<b>6. Side account as of December 31, 2013</b>		<b>\$25,848,530</b>	<b>\$25,848,530</b>
<b>(1. + 2. + 3. + 4. + 5.)</b>			

# Side Account Information

## Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$25,848,530	\$23,911,974
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$25,848,530</b>	<b>\$23,911,974</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.

	December 31, 2013	December 31, 2012
1. Total side account	\$25,848,530	\$23,911,974
2. Combined valuation payroll	26,036,072	26,451,010
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(9.28%)	(8.02%)

<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, 2013, 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 is 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>	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.

## 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 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

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

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

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

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

## Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial 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.

**Statement No. 68 of the Governmental Accounting Standards Board (GASB 68).** The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

**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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