

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Amity School District -- #4306**

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

Milliman has prepared this report for Amity School District to:

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Amity School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Amity School District***

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(22.48%)	(22.48%)	(22.48%)
<b>Net pension contribution rate</b>	<b>3.96%</b>	<b>0.00%</b>	<b>3.14%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>4.46%</b>	<b>0.43%</b>	<b>3.57%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$8,871,144	\$4,391,502
Allocated pooled OPSRP UAL	429,584	246,928
Side account	8,546,954	8,620,212
Net unfunded pension actuarial accrued liability	753,774	(3,981,782)
Combined valuation payroll	3,757,675	3,492,312
Net pension UAL as a percentage of payroll	20%	(114%)
Calculated Side Account Rate Relief	(22.48%)	(23.06%)
Allocated Pooled RHIA UAL	\$29,868	\$48,337

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	<b>N/A</b>	<b>\$8,620,212</b>	<b>\$8,620,212</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(692,573)	(692,573)
5. Side account earnings during 2014		620,315	620,315
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,546,954</b>	<b>\$8,546,954</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$8,546,954	\$8,620,212
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,546,954</b>	<b>\$8,620,212</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, 2014	December 31, 2013
1. Total side account	\$8,546,954	\$8,620,212
2. Combined valuation payroll	3,757,675	3,492,312
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(22.48%)	(23.06%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Baker School District #5J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Baker School District #5J**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(11.94%)	(11.94%)	(11.94%)
<b>Net pension contribution rate</b>	<b>14.50%</b>	<b>8.88%</b>	<b>13.68%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>15.00%</b>	<b>9.31%</b>	<b>14.11%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$20,046,052	\$9,983,919
Allocated pooled OPSRP UAL	970,728	561,381
Side account	10,258,631	10,312,991
Net unfunded pension actuarial accrued liability	10,758,149	232,309
Combined valuation payroll	8,491,188	7,939,643
Net pension UAL as a percentage of payroll	127%	3%
Calculated Side Account Rate Relief	(11.94%)	(12.14%)
Allocated Pooled RHIA UAL	\$67,493	\$109,893

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$10,312,991</b>	<b>\$10,312,991</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(796,560)	(796,560)
5. Side account earnings during 2014		743,200	743,200
<b>6. Side account as of December 31, 2014</b> <i>(1. + 2. + 3. + 4. + 5.)</i>		<b>\$10,258,631</b>	<b>\$10,258,631</b>

## Side Account Information

### Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$10,258,631	\$10,312,991
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$10,258,631</b>	<b>\$10,312,991</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, 2014	December 31, 2013
1. Total side account	\$10,258,631	\$10,312,991
2. Combined valuation payroll	8,491,188	7,939,643
3. Amortization factor	10.118	10.703
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(11.94%)	(12.14%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Banks School District -- #4035**

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

Milliman has prepared this report for Banks School District to:

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Banks School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Banks School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(5.79%)	(5.79%)	(5.79%)
<b>Net pension contribution rate</b>	<b>20.65%</b>	<b>15.03%</b>	<b>19.83%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>21.15%</b>	<b>15.46%</b>	<b>20.26%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation report.

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

### ***Banks School District***

	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$9,669,179	\$4,743,576
Allocated pooled OPSRP UAL	468,229	266,724
Side account	2,399,389	2,445,317
Net unfunded pension actuarial accrued liability	7,738,019	2,564,983
Combined valuation payroll	4,095,710	3,772,296
Net pension UAL as a percentage of payroll	189%	68%
Calculated Side Account Rate Relief	(5.79%)	(6.06%)
Allocated Pooled RHIA UAL	\$32,555	\$52,213

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	<b>N/A</b>	<b>\$2,445,317</b>	<b>\$2,445,317</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(218,858)	(218,858)
5. Side account earnings during 2014		173,930	173,930
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,399,389</b>	<b>\$2,399,389</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$2,399,389	\$2,445,317
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,399,389</b>	<b>\$2,445,317</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, 2014	December 31, 2013
1. Total side account	\$2,399,389	\$2,445,317
2. Combined valuation payroll	4,095,710	3,772,296
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.79%)	(6.06%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee', with a long horizontal flourish extending to the right.

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau', with a long horizontal flourish extending to the right.

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Beaverton School District -- #4062**

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

Milliman has prepared this report for Beaverton School District to:

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Beaverton School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Beaverton School District**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(8.06%)	(8.06%)	(8.06%)
<b>Net pension contribution rate</b>	<b>18.38%</b>	<b>12.76%</b>	<b>17.56%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>18.88%</b>	<b>13.19%</b>	<b>17.99%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$481,942,621	\$236,101,670
Allocated pooled OPSRP UAL	23,338,013	13,275,650
Side account	166,381,136	168,018,164
Net unfunded pension actuarial accrued liability	338,899,498	81,359,156
Combined valuation payroll	204,143,210	187,758,232
Net pension UAL as a percentage of payroll	166%	43%
Calculated Side Account Rate Relief	(8.06%)	(8.36%)
Allocated Pooled RHIA UAL	\$1,622,650	\$2,598,775

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$168,018,164</b>	<b>\$168,018,164</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(13,646,352)	(13,646,352)
5. Side account earnings during 2014		12,010,324	12,010,324
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$166,381,136</b>	<b>\$166,381,136</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$166,381,136	\$168,018,164
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$166,381,136</b>	<b>\$168,018,164</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, 2014	December 31, 2013
1. Total side account	\$166,381,136	\$168,018,164
2. Combined valuation payroll	204,143,210	187,758,232
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.06%)	(8.36%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Bend-La Pine Public Schools -- #3291**

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Bend-La Pine Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Bend-La Pine Public Schools***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(9.81%)	(9.81%)	(9.81%)
<b>Net pension contribution rate</b>	<b>16.63%</b>	<b>11.01%</b>	<b>15.81%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>17.13%</b>	<b>11.44%</b>	<b>16.24%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$186,847,760	\$93,821,259
Allocated pooled OPSRP UAL	9,048,080	5,275,432
Side account	78,510,061	79,542,008
Net unfunded pension actuarial accrued liability	117,385,779	19,554,683
Combined valuation payroll	79,145,732	74,610,712
Net pension UAL as a percentage of payroll	148%	26%
Calculated Side Account Rate Relief	(9.81%)	(9.96%)
Allocated Pooled RHIA UAL	\$629,097	\$1,032,692

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	<b>N/A</b>	<b>\$79,542,008</b>	<b>\$79,542,008</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(3,000)	(3,000)
4. Amount transferred to employer reserves during 2014		(6,708,584)	(6,708,584)
5. Side account earnings during 2014		5,679,637	5,679,637
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$78,510,061</b>	<b>\$78,510,061</b>

## Side Account Information

### Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$45,707,902	\$46,310,762
Side Account 2	27,697,837	28,064,947
Side Account 3	5,104,322	5,166,299
<b>Total</b>	<b>\$78,510,061</b>	<b>\$79,542,008</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, 2014	December 31, 2013
1. Total side account	\$78,510,061	\$79,542,008
2. Combined valuation payroll	79,145,732	74,610,712
3. Amortization factor	10.118	10.703
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(9.81%)	(9.96%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

Milliman has prepared this report for Brookings-Harbor School District #17C to:

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Brookings-Harbor School District #17C.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Brookings-Harbor School District #17C***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(17.71%)	(17.71%)	(17.71%)
<b>Net pension contribution rate</b>	<b>8.73%</b>	<b>3.11%</b>	<b>7.91%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>9.23%</b>	<b>3.54%</b>	<b>8.34%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation report.

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

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

	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$16,345,365	\$8,333,899
Allocated pooled OPSRP UAL	791,522	468,603
Side account	12,408,376	12,549,501
Net unfunded pension actuarial accrued liability	4,728,511	(3,746,999)
Combined valuation payroll	6,923,636	6,627,476
Net pension UAL as a percentage of payroll	68%	(57%)
Calculated Side Account Rate Relief	(17.71%)	(17.69%)
Allocated Pooled RHIA UAL	\$55,033	\$91,731

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	N/A	<b>\$12,549,501</b>	<b>\$12,549,501</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2014		(1,037,687)	(1,037,687)
5. Side account earnings during 2014		898,563	898,563
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$12,408,376</b>	<b>\$12,408,376</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$7,763,330	\$7,851,023
Side Account 2	4,645,047	4,698,478
Side Account 3	0	0
<b>Total</b>	<b>\$12,408,376</b>	<b>\$12,549,501</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, 2014	December 31, 2013
1. Total side account	\$12,408,376	\$12,549,501
2. Combined valuation payroll	6,923,636	6,627,476
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(17.71%)	(17.69%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Canby School District -- #4333**

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

Milliman has prepared this report for Canby School District to:

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Canby School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Canby School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(21.65%)	(21.65%)	(21.65%)
<b>Net pension contribution rate</b>	<b>4.79%</b>	<b>0.00%</b>	<b>3.97%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>5.29%</b>	<b>0.43%</b>	<b>4.40%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$49,580,733	\$26,998,359
Allocated pooled OPSRP UAL	2,400,941	1,518,078
Side account	46,016,474	45,589,572
Net unfunded pension actuarial accrued liability	5,965,200	(17,073,135)
Combined valuation payroll	21,001,608	21,470,260
Net pension UAL as a percentage of payroll	28%	(80%)
Calculated Side Account Rate Relief	(21.65%)	(19.84%)
Allocated Pooled RHIA UAL	\$166,933	\$297,171

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2013</b>	<b>N/A</b>	<b>\$45,589,572</b>	<b>\$45,589,572</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2014		(2,853,285)	(2,853,285)
5. Side account earnings during 2014		3,282,187	3,282,187
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$46,016,474</b>	<b>\$46,016,474</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$20,276,919	\$20,090,836
Side Account 2	25,739,555	25,498,736
Side Account 3	0	0
<b>Total</b>	<b>\$46,016,474</b>	<b>\$45,589,572</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, 2014	December 31, 2013
1. Total side account	\$46,016,474	\$45,589,572
2. Combined valuation payroll	21,001,608	21,470,260
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(21.65%)	(19.84%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Cascade School District #5.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Cascade School District #5**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(18.29%)	(18.29%)	(18.29%)
<b>Net pension contribution rate</b>	<b>8.15%</b>	<b>2.53%</b>	<b>7.33%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>8.65%</b>	<b>2.96%</b>	<b>7.76%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$22,934,683	\$11,432,314
Allocated pooled OPSRP UAL	1,110,609	642,822
Side account	17,977,344	18,023,638
Net unfunded pension actuarial accrued liability	6,067,948	(5,948,502)
Combined valuation payroll	9,714,766	9,091,469
Net pension UAL as a percentage of payroll	62%	(65%)
Calculated Side Account Rate Relief	(18.29%)	(18.52%)
Allocated Pooled RHIA UAL	\$77,219	\$125,836

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



## 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, 2013</b>	<b>N/A</b>	<b>\$18,023,638</b>	<b>\$18,023,638</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(1,342,158)	(1,342,158)
5. Side account earnings during 2014		1,296,864	1,296,864
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$17,977,344</b>	<b>\$17,977,344</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$17,977,344	\$18,023,638
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$17,977,344</b>	<b>\$18,023,638</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, 2014	December 31, 2013
1. Total side account	\$17,977,344	\$18,023,638
2. Combined valuation payroll	9,714,766	9,091,469
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(18.29%)	(18.52%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Central School District #13J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Central School District #13J**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(16.85%)	(16.85%)	(16.85%)
<b>Net pension contribution rate</b>	<b>9.59%</b>	<b>3.97%</b>	<b>8.77%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>10.09%</b>	<b>4.40%</b>	<b>9.20%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$33,132,413	\$16,852,156
Allocated pooled OPSRP UAL	1,604,433	947,572
Side account	23,921,175	24,163,005
Net unfunded pension actuarial accrued liability	10,815,671	(6,363,277)
Combined valuation payroll	14,034,362	13,401,561
Net pension UAL as a percentage of payroll	77%	(47%)
Calculated Side Account Rate Relief	(16.85%)	(16.85%)
Allocated Pooled RHIA UAL	\$111,553	\$185,492

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	<b>N/A</b>	<b>\$24,163,005</b>	<b>\$24,163,005</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(1,968,054)	(1,968,054)
5. Side account earnings during 2014		1,727,225	1,727,225
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$23,921,175</b>	<b>\$23,921,175</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$23,921,175	\$24,163,005
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$23,921,175</b>	<b>\$24,163,005</b>

## Development of Side Account Rate

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

	December 31, 2014	December 31, 2013
1. Total side account	\$23,921,175	\$24,163,005
2. Combined valuation payroll	14,034,362	13,401,561
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(16.85%)	(16.85%)

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

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to City of Phoenix School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for City of Phoenix School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(13.31%)	(13.31%)	(13.31%)
<b>Net pension contribution rate</b>	<b>13.13%</b>	<b>7.51%</b>	<b>12.31%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>13.63%</b>	<b>7.94%</b>	<b>12.74%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$24,317,240	\$13,269,493
Allocated pooled OPSRP UAL	1,177,559	746,124
Side account	13,868,323	13,853,368
Net unfunded pension actuarial accrued liability	11,626,476	162,249
Combined valuation payroll	10,300,395	10,552,473
Net pension UAL as a percentage of payroll	113%	2%
Calculated Side Account Rate Relief	(13.31%)	(12.27%)
Allocated Pooled RHIA UAL	\$81,874	\$146,058

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$13,853,368</b>	<b>\$13,853,368</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(981,690)	(981,690)
5. Side account earnings during 2014		997,645	997,645
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$13,868,323</b>	<b>\$13,868,323</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$13,868,323	\$13,853,368
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$13,868,323</b>	<b>\$13,853,368</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, 2014	December 31, 2013
1. Total side account	\$13,868,323	\$13,853,368
2. Combined valuation payroll	10,300,395	10,552,473
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(13.31%)	(12.27%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Clackamas Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Clackamas Education Service District**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(12.23%)	(12.23%)	(12.23%)
<b>Net pension contribution rate</b>	<b>14.21%</b>	<b>8.59%</b>	<b>13.39%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>14.71%</b>	<b>9.02%</b>	<b>13.82%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation report.

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

### ***Clackamas Education Service District***

	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$32,598,009	\$18,515,337
Allocated pooled OPSRP UAL	1,578,555	1,041,090
Side account	17,083,455	17,192,302
Net unfunded pension actuarial accrued liability	17,093,109	2,364,125
Combined valuation payroll	13,807,997	14,724,195
Net pension UAL as a percentage of payroll	124%	16%
Calculated Side Account Rate Relief	(12.23%)	(10.91%)
Allocated Pooled RHIA UAL	\$109,754	\$203,799

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	<b>N/A</b>	<b>\$17,192,302</b>	<b>\$17,192,302</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(1,331,890)	(1,331,890)
5. Side account earnings during 2014		1,224,043	1,224,043
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$17,083,455</b>	<b>\$17,083,455</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$17,083,455	\$17,192,302
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$17,083,455</b>	<b>\$17,192,302</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, 2014	December 31, 2013
1. Total side account	\$17,083,455	\$17,192,302
2. Combined valuation payroll	13,807,997	14,724,195
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.23%)	(10.91%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Clatsop County School District #1C.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Clatsop County School District #1C***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(23.78%)	(23.78%)	(23.78%)
<b>Net pension contribution rate</b>	<b>2.66%</b>	<b>0.00%</b>	<b>1.84%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>3.16%</b>	<b>0.43%</b>	<b>2.27%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation report.

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

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

	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$22,747,195	\$10,666,709
Allocated pooled OPSRP UAL	1,101,530	599,773
Side account	23,180,563	23,218,482
Net unfunded pension actuarial accrued liability	668,162	(11,952,000)
Combined valuation payroll	9,635,349	8,482,627
Net pension UAL as a percentage of payroll	7%	(141%)
Calculated Side Account Rate Relief	(23.78%)	(25.57%)
Allocated Pooled RHIA UAL	\$76,587	\$117,409

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$23,218,482</b>	<b>\$23,218,482</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(1,714,877)	(1,714,877)
5. Side account earnings during 2014		1,677,958	1,677,958
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$23,180,563</b>	<b>\$23,180,563</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$23,180,563	\$23,218,482
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$23,180,563</b>	<b>\$23,218,482</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, 2014	December 31, 2013
1. Total side account	\$23,180,563	\$23,218,482
2. Combined valuation payroll	9,635,349	8,482,627
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(23.78%)	(25.57%)

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

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Coos Bay School District #9.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Coos Bay School District #9***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(7.19%)	(7.19%)	(7.19%)
<b>Net pension contribution rate</b>	<b>19.25%</b>	<b>13.63%</b>	<b>18.43%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>19.75%</b>	<b>14.06%</b>	<b>18.86%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$28,936,597	\$14,906,058
Allocated pooled OPSRP UAL	1,401,251	838,146
Side account	8,912,279	8,918,247
Net unfunded pension actuarial accrued liability	21,425,569	6,825,957
Combined valuation payroll	12,257,081	11,853,940
Net pension UAL as a percentage of payroll	175%	58%
Calculated Side Account Rate Relief	(7.19%)	(7.03%)
Allocated Pooled RHIA UAL	\$97,426	\$164,071

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### ***OPSRP***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### ***Retiree Healthcare***

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	<b>N/A</b>	<b>\$8,918,247</b>	<b>\$8,918,247</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(647,786)	(647,786)
5. Side account earnings during 2014		642,818	642,818
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,912,279</b>	<b>\$8,912,279</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$8,912,279	\$8,918,247
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,912,279</b>	<b>\$8,918,247</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, 2014	December 31, 2013
1. Total side account	\$8,912,279	\$8,918,247
2. Combined valuation payroll	12,257,081	11,853,940
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(7.19%)	(7.03%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee', with a long horizontal flourish extending to the right.

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau', with a long horizontal flourish extending to the right.

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Corvallis School District #509J -- #3039**

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Corvallis School District #509J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Corvallis School District #509J**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(12.85%)	(12.85%)	(12.85%)
<b>Net pension contribution rate</b>	<b>13.59%</b>	<b>7.97%</b>	<b>12.77%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>14.09%</b>	<b>8.40%</b>	<b>13.20%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$71,071,943	\$35,759,428
Allocated pooled OPSRP UAL	3,441,650	2,010,700
Side account	39,799,074	39,861,515
Net unfunded pension actuarial accrued liability	34,714,519	(2,091,387)
Combined valuation payroll	30,104,942	28,437,440
Net pension UAL as a percentage of payroll	115%	(7%)
Calculated Side Account Rate Relief	(12.85%)	(12.90%)
Allocated Pooled RHIA UAL	\$239,292	\$393,605

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$39,861,515</b>	<b>\$39,861,515</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(3,000)	(3,000)
4. Amount transferred to employer reserves during 2014		(2,935,782)	(2,935,782)
5. Side account earnings during 2014		2,876,342	2,876,342
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$39,799,074</b>	<b>\$39,799,074</b>

## Side Account Information

### Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$29,276,468	\$29,354,308
Side Account 2	4,146,485	4,159,698
Side Account 3	6,376,121	6,347,509
<b>Total</b>	<b>\$39,799,074</b>	<b>\$39,861,515</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, 2014	December 31, 2013
1. Total side account	\$39,799,074	\$39,861,515
2. Combined valuation payroll	30,104,942	28,437,440
3. Amortization factor	10.304	10.881
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(12.85%)	(12.90%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Creswell School District #40.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Creswell School District #40**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(5.00%)	(5.00%)	(5.00%)
<b>Net pension contribution rate</b>	<b>21.44%</b>	<b>15.82%</b>	<b>20.62%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>21.94%</b>	<b>16.25%</b>	<b>21.05%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$13,882,012	\$7,023,903
Allocated pooled OPSRP UAL	672,235	394,944
Side account	2,972,861	2,987,741
Net unfunded pension actuarial accrued liability	11,581,386	4,431,106
Combined valuation payroll	5,880,199	5,585,711
Net pension UAL as a percentage of payroll	197%	79%
Calculated Side Account Rate Relief	(5.00%)	(5.00%)
Allocated Pooled RHIA UAL	\$46,739	\$77,312

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	<b>N/A</b>	<b>\$2,987,741</b>	<b>\$2,987,741</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(229,054)	(229,054)
5. Side account earnings during 2014		215,174	215,174
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,972,861</b>	<b>\$2,972,861</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$2,972,861	\$2,987,741
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,972,861</b>	<b>\$2,987,741</b>

## Development of Side Account Rate

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

	December 31, 2014	December 31, 2013
1. Total side account	\$2,972,861	\$2,987,741
2. Combined valuation payroll	5,880,199	5,585,711
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.00%)	(5.00%)

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

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee', with a long horizontal flourish extending to the right.

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau', with a long horizontal flourish extending to the right.

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Crook County School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Crook County School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(21.11%)	(21.11%)	(21.11%)
<b>Net pension contribution rate</b>	<b>5.33%</b>	<b>0.00%</b>	<b>4.51%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>5.83%</b>	<b>0.43%</b>	<b>4.94%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$32,854,006	\$16,908,069
Allocated pooled OPSRP UAL	1,590,951	950,716
Side account	29,728,565	29,863,022
Net unfunded pension actuarial accrued liability	4,716,392	(12,004,237)
Combined valuation payroll	13,916,433	13,446,026
Net pension UAL as a percentage of payroll	34%	(89%)
Calculated Side Account Rate Relief	(21.11%)	(20.76%)
Allocated Pooled RHIA UAL	\$110,616	\$186,107

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$29,863,022</b>	<b>\$29,863,022</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2014		(2,275,223)	(2,275,223)
5. Side account earnings during 2014		2,142,766	2,142,766
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$29,728,565</b>	<b>\$29,728,565</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$12,960,113	\$13,017,573
Side Account 2	16,768,452	16,845,448
Side Account 3	0	0
<b>Total</b>	<b>\$29,728,565</b>	<b>\$29,863,022</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, 2014	December 31, 2013
1. Total side account	\$29,728,565	\$29,863,022
2. Combined valuation payroll	13,916,433	13,446,026
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(21.11%)	(20.76%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee', with a long horizontal flourish extending to the right.

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau', written in a cursive style.

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to David Douglas School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for David Douglas School District**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(3.80%)	(3.80%)	(3.80%)
<b>Net pension contribution rate</b>	<b>22.64%</b>	<b>17.02%</b>	<b>21.82%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>23.14%</b>	<b>17.45%</b>	<b>22.25%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$153,607,734	\$76,856,945
Allocated pooled OPSRP UAL	7,438,436	4,321,553
Side account	25,017,167	25,248,774
Net unfunded pension actuarial accrued liability	136,029,003	55,929,724
Combined valuation payroll	65,065,787	61,119,958
Net pension UAL as a percentage of payroll	209%	92%
Calculated Side Account Rate Relief	(3.80%)	(3.86%)
Allocated Pooled RHIA UAL	\$517,181	\$845,966

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	N/A	<b>\$25,248,774</b>	<b>\$25,248,774</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(2,037,432)	(2,037,432)
5. Side account earnings during 2014		1,806,825	1,806,825
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$25,017,167</b>	<b>\$25,017,167</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$25,017,167	\$25,248,774
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$25,017,167</b>	<b>\$25,248,774</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, 2014	December 31, 2013
1. Total side account	\$25,017,167	\$25,248,774
2. Combined valuation payroll	65,065,787	61,119,958
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(3.80%)	(3.86%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Dayton Public Schools -- #4291**

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

Milliman has prepared this report for Dayton Public Schools to:

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Dayton Public Schools.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Dayton Public Schools***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(18.83%)	(18.83%)	(18.83%)
<b>Net pension contribution rate</b>	<b>7.61%</b>	<b>1.99%</b>	<b>6.79%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>8.11%</b>	<b>2.42%</b>	<b>7.22%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation report.

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

### ***Dayton Public Schools***

	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$10,988,905	\$5,796,117
Allocated pooled OPSRP UAL	532,136	325,907
Side account	8,868,203	8,811,057
Net unfunded pension actuarial accrued liability	2,652,838	(2,689,033)
Combined valuation payroll	4,654,725	4,609,322
Net pension UAL as a percentage of payroll	57%	(58%)
Calculated Side Account Rate Relief	(18.83%)	(17.86%)
Allocated Pooled RHIA UAL	\$36,998	\$63,798

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$8,811,057</b>	<b>\$8,811,057</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2014		(577,870)	(577,870)
5. Side account earnings during 2014		637,016	637,016
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,868,203</b>	<b>\$8,868,203</b>

## Side Account Information

### Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$3,764,508	\$3,740,177
Side Account 2	5,103,694	5,070,880
Side Account 3	0	0
<b>Total</b>	<b>\$8,868,203</b>	<b>\$8,811,057</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, 2014	December 31, 2013
1. Total side account	\$8,868,203	\$8,811,057
2. Combined valuation payroll	4,654,725	4,609,322
3. Amortization factor	10.118	10.703
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(18.83%)	(17.86%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Douglas Education Service District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Douglas Education Service District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(5.20%)	(5.20%)	(5.20%)
<b>Net pension contribution rate</b>	<b>21.24%</b>	<b>15.62%</b>	<b>20.42%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>21.74%</b>	<b>16.05%</b>	<b>20.85%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$20,445,047	\$10,213,752
Allocated pooled OPSRP UAL	990,049	574,304
Side account	4,554,870	4,548,577
Net unfunded pension actuarial accrued liability	16,880,226	6,239,479
Combined valuation payroll	8,660,196	8,122,416
Net pension UAL as a percentage of payroll	195%	77%
Calculated Side Account Rate Relief	(5.20%)	(5.23%)
Allocated Pooled RHIA UAL	\$68,836	\$112,423

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### ***OPSRP***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### ***Retiree Healthcare***

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	N/A	<b>\$4,548,577</b>	<b>\$4,548,577</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(320,541)	(320,541)
5. Side account earnings during 2014		327,833	327,833
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$4,554,870</b>	<b>\$4,554,870</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$4,554,870	\$4,548,577
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$4,554,870</b>	<b>\$4,548,577</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, 2014	December 31, 2013
1. Total side account	\$4,554,870	\$4,548,577
2. Combined valuation payroll	8,660,196	8,122,416
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(5.20%)	(5.23%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee', with a long horizontal flourish extending to the right.

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau', with a long horizontal flourish extending to the right.

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Echo School District -- #3927**

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

Milliman has prepared this report for Echo School District to:

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Echo School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Echo School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(12.53%)	(12.53%)	(12.53%)
<b>Net pension contribution rate</b>	<b>13.91%</b>	<b>8.29%</b>	<b>13.09%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>14.41%</b>	<b>8.72%</b>	<b>13.52%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$3,477,973	\$1,709,787
Allocated pooled OPSRP UAL	168,420	96,139
Side account	1,867,271	1,878,834
Net unfunded pension actuarial accrued liability	1,779,122	(72,908)
Combined valuation payroll	1,473,214	1,359,696
Net pension UAL as a percentage of payroll	121%	(5%)
Calculated Side Account Rate Relief	(12.53%)	(12.91%)
Allocated Pooled RHIA UAL	\$11,710	\$18,820

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### ***OPSRP***

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### ***Retiree Healthcare***

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	N/A	<b>\$1,878,834</b>	<b>\$1,878,834</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(144,815)	(144,815)
5. Side account earnings during 2014		134,253	134,253
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$1,867,271</b>	<b>\$1,867,271</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$1,867,271	\$1,878,834
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$1,867,271</b>	<b>\$1,878,834</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, 2014	December 31, 2013
1. Total side account	\$1,867,271	\$1,878,834
2. Combined valuation payroll	1,473,214	1,359,696
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(12.53%)	(12.91%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Estacada School District #108.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### **Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Estacada School District #108**

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(13.64%)	(13.64%)	(13.64%)
<b>Net pension contribution rate</b>	<b>12.80%</b>	<b>7.18%</b>	<b>11.98%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>13.30%</b>	<b>7.61%</b>	<b>12.41%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation report.

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

### ***Estacada School District #108***

	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$20,270,744	\$10,855,171
Allocated pooled OPSRP UAL	981,608	610,370
Side account	11,852,382	11,743,627
Net unfunded pension actuarial accrued liability	9,399,970	(278,086)
Combined valuation payroll	8,586,364	8,632,500
Net pension UAL as a percentage of payroll	109%	(3%)
Calculated Side Account Rate Relief	(13.64%)	(12.71%)
Allocated Pooled RHIA UAL	\$68,249	\$119,483

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	N/A	<b>\$11,743,627</b>	<b>\$11,743,627</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(736,547)	(736,547)
5. Side account earnings during 2014		846,303	846,303
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$11,852,382</b>	<b>\$11,852,382</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$11,852,382	\$11,743,627
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$11,852,382</b>	<b>\$11,743,627</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, 2014	December 31, 2013
1. Total side account	\$11,852,382	\$11,743,627
2. Combined valuation payroll	8,586,364	8,632,500
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(13.64%)	(12.71%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee', with a long horizontal flourish extending to the right.

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau', with a long horizontal flourish extending to the right.

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Eugene School District 4J.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Eugene School District 4J***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(6.07%)	(6.07%)	(6.07%)
<b>Net pension contribution rate</b>	<b>20.37%</b>	<b>14.75%</b>	<b>19.55%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>20.87%</b>	<b>15.18%</b>	<b>19.98%</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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$192,981,957	\$98,779,071
Allocated pooled OPSRP UAL	9,345,128	5,554,202
Side account	50,188,241	50,264,555
Net unfunded pension actuarial accrued liability	152,138,844	54,068,718
Combined valuation payroll	81,744,080	78,553,378
Net pension UAL as a percentage of payroll	186%	69%
Calculated Side Account Rate Relief	(6.07%)	(5.98%)
Allocated Pooled RHIA UAL	\$649,750	\$1,087,263

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$50,264,555</b>	<b>\$50,264,555</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(3,691,186)	(3,691,186)
5. Side account earnings during 2014		3,615,872	3,615,872
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$50,188,241</b>	<b>\$50,188,241</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$50,188,241	\$50,264,555
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$50,188,241</b>	<b>\$50,264,555</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, 2014	December 31, 2013
1. Total side account	\$50,188,241	\$50,264,555
2. Combined valuation payroll	81,744,080	78,553,378
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(6.07%)	(5.98%)

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

## Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

Falls City School District/3887  
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

**Falls City School District -- #3887**

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Falls City School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Falls City School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(26.99%)	(26.99%)	(26.99%)
<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	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$1,981,033	\$1,128,794
Allocated pooled OPSRP UAL	95,931	63,470
Side account	2,291,397	2,294,820
Net unfunded pension actuarial accrued liability	(214,433)	(1,102,556)
Combined valuation payroll	839,134	897,666
Net pension UAL as a percentage of payroll	(26%)	(123%)
Calculated Side Account Rate Relief	(26.99%)	(23.89%)
Allocated Pooled RHIA UAL	\$6,670	\$12,425

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# 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, 2013</b>	N/A	<b>\$2,294,820</b>	<b>\$2,294,820</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(167,634)	(167,634)
5. Side account earnings during 2014		165,211	165,211
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$2,291,397</b>	<b>\$2,291,397</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$2,291,397	\$2,294,820
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$2,291,397</b>	<b>\$2,294,820</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, 2014	December 31, 2013
1. Total side account	\$2,291,397	\$2,294,820
2. Combined valuation payroll	839,134	897,666
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(26.99%)	(23.89%)

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

# Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.

November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee', with a long horizontal flourish extending to the right.

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau', with a long horizontal flourish extending to the right.

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015



# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Fern Ridge School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Fern Ridge School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(13.49%)	(13.49%)	(13.49%)
<b>Net pension contribution rate</b>	<b>12.95%</b>	<b>7.33%</b>	<b>12.13%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>13.45%</b>	<b>7.76%</b>	<b>12.56%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.

# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation 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, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$13,965,455	\$6,806,212
Allocated pooled OPSRP UAL	676,275	382,703
Side account	8,076,232	8,139,327
Net unfunded pension actuarial accrued liability	6,565,498	(950,412)
Combined valuation payroll	5,915,544	5,412,593
Net pension UAL as a percentage of payroll	111%	(18%)
Calculated Side Account Rate Relief	(13.49%)	(14.05%)
Allocated Pooled RHIA UAL	\$47,020	\$74,916

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### **OPSRP**

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### **Retiree Healthcare**

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%



# 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, 2013</b>	<b>N/A</b>	<b>\$8,139,327</b>	<b>\$8,139,327</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(644,137)	(644,137)
5. Side account earnings during 2014		582,042	582,042
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$8,076,232</b>	<b>\$8,076,232</b>

## Side Account Information

### Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$8,076,232	\$8,139,327
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$8,076,232</b>	<b>\$8,139,327</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, 2014	December 31, 2013
1. Total side account	\$8,076,232	\$8,139,327
2. Combined valuation payroll	5,915,544	5,412,593
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(13.49%)	(14.05%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

### Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.

## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

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.



November 2015

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, 2014. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board. GASB 68 information will be provided separately by PERS and is not included in this report.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2017 through June 30, 2019 will be calculated in the December 31, 2015 actuarial valuation.

This report reflects the the benefit provisions in effect as of December 31, 2014, as adjusted for the Oregon Supreme Court decision announced in April 2015. 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 actuarial valuation report. Further, costs of pension obligation bond payments are not included in this or the system-wide actuarial valuation report.

**If you have any questions about this report, please contact Debra Hembree, Actuarial Services Coordinator 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 actuarial 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).



November 2015  
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 2015.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2017 to June 2019 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.



November 2015  
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 actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. 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 actuarial valuation report.

Sincerely,

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

Matt Larrabee, FSA, EA, MAAA  
Principal and Consulting Actuary

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

Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary



# **ACTUARIAL VALUATION REPORT DECEMBER 31, 2014**

## **OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHOOL DISTRICT POOL**

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

November 2015

# CONTENTS

**Executive Summary** ..... 1

*Employer Contribution Rates* ..... 1

*Accounting Information* ..... 3

*Principal Valuation Results* ..... 5

        ▪ Employer ..... 5

        ▪ School District Pool ..... 6

        ▪ OPSRP ..... 7

        ▪ Retiree Healthcare ..... 7

**Side Account Information** ..... 8

**Brief Summary of Actuarial Methods and Assumptions** ..... 10

**Brief Summary of Changes in Plan Provisions** ..... 12

**Glossary** ..... 13

# Executive Summary

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

- Provide summary December 31, 2014 valuation results for the Tier 1/Tier 2 School District Pool, Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance Account (RHIA),
- Provide advisory information calculated as of December 31, 2014 on estimated employer-specific contribution rates effective July 1, 2017 through June 30, 2019,
- Provide employer-specific information on side accounts as of December 31, 2014, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statement Number 45. GASB 68 information will be provided separately by PERS and is not included in this report.

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, 2014 system-wide actuarial valuation report. This report develops advisory employer-specific side account rates and applies the results from the system-wide valuation to Forest Grove School District.

## Employer Contribution Rates

The following table summarizes the employer contribution rates calculated as of December 31, 2014 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

### ***Advisory 2017 - 2019 Employer Rates Calculated as of December 31, 2014 for Forest Grove School District***

	Payroll		
	Tier 1/Tier 2	General Service	Police & Fire
<b>Pension</b>			
Normal cost rate	13.72%	8.10%	12.90%
Tier 1/Tier 2 UAL rate <sup>1</sup>	11.71%	11.71%	11.71%
OPSRP UAL rate	1.01%	1.01%	1.01%
Side account rate relief <sup>2</sup>	(8.84%)	(8.84%)	(8.84%)
<b>Net pension contribution rate</b>	<b>17.60%</b>	<b>11.98%</b>	<b>16.78%</b>
<b>Retiree Healthcare</b>			
Normal cost rate	0.07%	0.00%	0.00%
UAL rate	0.43%	0.43%	0.43%
<b>Net retiree healthcare rate</b>	<b>0.50%</b>	<b>0.43%</b>	<b>0.43%</b>
<b>Total net employer contribution rate</b>	<b>18.10%</b>	<b>12.41%</b>	<b>17.21%</b>

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

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

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

# Executive Summary

## Employer Contribution Rates (continued)

### ***Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 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, 2014 is 75%.

<b>Funded Status as of December 31, 2015</b>	<b>70% to 130%</b>	<b>Under 60% or Over 140%</b>
2015-2017 Normal Cost + Tier 1/Tier 2 UAL Rate	21.19%	21.19%
Minimum 2017-2019 Rate	16.95%	12.71%
Maximum 2017-2019 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*

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 replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are 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.



# 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 was calculated as a part of the December 31, 2013 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

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

	Payroll		
	Tier 1 / Tier 2	OPSRP	
		General Service	Police and Fire
July 1, 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 actuarial valuation report.

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

### ***Forest Grove School District***

	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Allocated pooled T1/T2 UAL	\$67,994,519	\$32,739,763
Allocated pooled OPSRP UAL	3,292,626	1,840,909
Side account	25,768,912	25,848,530
Net unfunded pension actuarial accrued liability	45,518,233	8,732,142
Combined valuation payroll	28,801,394	26,036,072
Net pension UAL as a percentage of payroll	158%	34%
Calculated Side Account Rate Relief	(8.84%)	(9.28%)
Allocated Pooled RHIA UAL	\$228,930	\$360,367

*In the above exhibit, 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 proportionate share of Net Pension Liability (NPL) that will be allocated to employers under GASB 68.*

# Executive Summary

## Principal Valuation Results (continued)

### *School District Pool*

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$223.1	\$198.6
Tier 1/Tier 2 valuation payroll	1,626.0	1,663.0
Normal cost rate	13.72%	11.94%
Actuarial accrued liability	\$27,059.9	\$23,392.6
Actuarial asset value	20,277.9	19,967.8
Unfunded actuarial accrued liability	6,782.0	3,424.8
Funded status	75%	85%
Combined valuation payroll	\$2,872.7	\$2,723.5
UAL as a percentage of payroll	236%	126%
UAL rate (includes Multnomah Fire District #10)	11.71%	9.25%
Tier 1/Tier 2 Active Members		
▪ Count	30,320	32,499
▪ Average Age	51.8	51.4
▪ Average Service	17.9	17.2
▪ Average Valuation Payroll	\$53,626	\$51,171
Tier 1/Tier 2 Dormant Members		
▪ Count	13,670	13,923
▪ Average Age	54.5	53.8
▪ Average Monthly Benefit	\$1,032	\$1,007
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	63,492	62,324
▪ Average Age	71.6	71.3
▪ Average Monthly Benefit	\$2,098	\$2,071

# Executive Summary

## Principal Valuation Results (continued)

### OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
General service normal cost	\$301.3	\$234.7
OPSRP general service valuation payroll	3,720.4	3,200.0
General service normal cost rate	8.10%	7.33%
Police and fire normal cost	\$59.6	\$45.5
OPSRP police and fire valuation payroll	462.3	398.1
Police and fire normal cost rate	12.90%	11.44%
Actuarial accrued liability	\$3,064.1	\$2,243.3
Actuarial asset value	2,024.6	1,630.2
Unfunded actuarial accrued liability	1,039.5	613.2
Funded status	66%	73%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	11%	7%
UAL rate	1.01%	0.61%

### Retiree Healthcare

RHIA (\$ in millions)	Actuarial Valuation as of	
	December 31, 2014	December 31, 2013
Normal cost	\$3.5	\$4.0
Tier 1 / Tier 2 valuation payroll	4,933.1	5,073.7
Normal cost rate	0.07%	0.08%
Actuarial accrued liability	\$468.4	\$473.6
Actuarial asset value	395.9	353.5
Unfunded actuarial accrued liability	72.5	120.0
Funded status	85%	75%
Combined valuation payroll	\$9,115.8	\$8,671.8
UAL as a percentage of payroll	1%	1%
UAL rate	0.43%	0.45%

# Side Account Information

## Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	<b>New</b>	<b>Continuing</b>	<b>Total</b>
<b>1. Side account as of December 31, 2013</b>	<b>N/A</b>	<b>\$25,848,530</b>	<b>\$25,848,530</b>
2. Deposits during 2014		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2014		(1,946,555)	(1,946,555)
5. Side account earnings during 2014		1,867,937	1,867,937
<b>6. Side account as of December 31, 2014</b> <b>(1. + 2. + 3. + 4. + 5.)</b>		<b>\$25,768,912</b>	<b>\$25,768,912</b>

# Side Account Information

## Side Account Balances

	December 31, 2014	December 31, 2013
Side Account 1	\$25,768,912	\$25,848,530
Side Account 2	0	0
Side Account 3	0	0
<b>Total</b>	<b>\$25,768,912</b>	<b>\$25,848,530</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, 2014	December 31, 2013
1. Total side account	\$25,768,912	\$25,848,530
2. Combined valuation payroll	28,801,394	26,036,072
3. Amortization factor	10.118	10.703
4. Total side account rate (-1. ÷ 2. ÷ 3.) <sup>1</sup>	(8.84%)	(9.28%)

<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, 2014 valuation can be found in the system-wide actuarial valuation 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 was 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 projected combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate generally will not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

## Economic Assumptions

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

<i>Net investment return</i>	7.50% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.50% compounded annually on members' regular account balances starting in 2015.</p> <p>7.50% compounded annually on members' variable account balances starting in 2015.</p>
<i>Consumer price inflation</i>	2.50% per year.
<i>Future general wage inflation</i>	3.50% per year.
<i>Healthcare cost inflation</i>	Ranging from 7.0% in 2015 to 4.4% in 2094.
<i>Administrative Expenses</i>	<p>\$5.5 million added to OPSRP normal cost.</p> <p>\$33.0 million added to Tier 1/Tier 2 normal cost.</p>

# Brief Summary of Actuarial Methods and Assumptions

## Changes Since Last Valuation

The key changes since the December 31, 2013 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

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

- **Allocation of Liability for Service Segments**

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

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

- **Investment Return and Interest Crediting**

The assumed investment return and interest crediting to both regular and variable account balances was reduced from 7.75% to 7.50%.

- **Inflation**

The inflation assumption was reduced from 2.75% to 2.50%.

- **Payroll Growth**

The assumed payroll growth rate was reduced from 3.75% to 3.50%.

- **Tier 1/Tier 2 Administrative Expenses**

Administrative expenses for the Tier 1/Tier 2 System are assumed to be \$33.0 million per year.

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

- **Mortality**

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience and the future projection of mortality has been changed to use mortality improvement Scale BB.

- **Disability, Retirement, and Termination**

Rates for the disability, retirement, and termination assumptions were adjusted.

A complete summary of all assumptions used as part of the December 31, 2014 actuarial valuation is contained in the system-wide actuarial valuation report.



## Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2013 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 actuarial valuation report.

- The Oregon Supreme Court decision in *Moro v. State of Oregon* stated that the reduced COLA amounts provided by Senate Bills 822 and 861 (both passed in 2013) only apply to benefits earned after the effective date of the legislation. As a result, PERS members who performed service both before and after the effective date will receive a blended COLA rate reflecting the differing COLA provisions applicable to each service period.

# 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.

## **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 used to provide pensions to the employees of more than one employer wherein pension obligations are pooled and plan assets can be used to pay the benefits of the employees of any employer that provides pension through the plan.

## **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.

## **Normal Cost**

The annual cost allocated 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.

# Glossary

## **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 estimated cost (as of the valuation date) of a series of future payments. 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 permissible period-to-period change in the base 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 prior to GASB 68.

## **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 pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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

**In compliance with the Americans with Disabilities Act, PERS will provide this document in an alternate format upon request. To request this, contact PERS at 888-320-7377 or TTY 503-603-7766.**

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.