

September 2014

Harney County/2004
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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



September 2014
Harney County/2004

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

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

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

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

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



September 2014
Harney County/2004

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Harney County -- #2004

September 2014

Secondary Employers

2041 Harney District Hospital

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Harney County to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Harney County.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Harney County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	13.57%	12.84%	16.26%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	(2.32%)	(2.32%)	(2.32%)	(2.32%)	(2.32%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	14.55%	13.82%	17.24%	8.31%	12.42%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	15.08%	14.35%	17.77%	8.76%	12.87%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Harney County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$2,829,546	\$3,689,876
Allocated pre-SLGRP pooled liability/(surplus)	(720,981)	(714,091)
Transition liability/(surplus)	(924,999)	(943,070)
Allocated pooled OPSRP UAL	263,867	254,010
Side account	0	0
Net unfunded pension actuarial accrued liability	1,447,433	2,286,725
Combined valuation payroll	3,731,888	3,603,856
Net pension UAL as a percentage of payroll	39%	63%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	(2.32%)	(2.32%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$51,653	\$75,610
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$674,598	\$103,821	15.80%	\$685,261	\$108,271
Tier 2 General Service	10.57%	756,829	79,997	10.58%	674,425	71,354
Total General Service		1,431,427	183,818		1,359,686	179,625
Tier 1 Police & Fire	17.62%	123,079	21,687	17.89%	113,811	20,361
Tier 2 Police & Fire	15.63%	265,204	41,451	15.70%	302,110	47,431
Total Police & Fire		388,283	63,138		415,921	67,792
Total		\$1,819,710	\$246,956		\$1,775,607	\$247,417
Employer normal cost rate						
General Service			12.84%			13.21%
Police & Fire			16.26%			16.30%
Aggregate (Default)			13.57%			13.93%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$943,070)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(1.94%)
B. Actual employer payroll	1,781,452
C. Payment to transition liability/(surplus)	(34,560)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(2.55%)
B. Actual employer payroll	1,962,439
C. Payment to transition liability/(surplus)	(50,042)
4. Supplemental payment to transition liability	0
5. Interest	(66,531)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	(\$924,999)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(924,999)	(943,070)
2. Combined valuation payroll	3,731,888	3,603,856
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(2.32%)	(2.32%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	3,731,888	3,603,856
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

September 2014

Harney Hospital/2855
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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

September 2014
Harney Hospital/2855

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

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

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

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

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



September 2014
Harney Hospital/2855

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Harney Hospital -- #2855

September 2014

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CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Harney Hospital to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Harney Hospital.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Harney Hospital

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	12.30%	12.30%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(4.84%)	(4.84%)	(4.84%)	(4.84%)	(4.84%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	12.57%	12.57%	16.78%	7.60%	11.71%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	13.10%	13.10%	17.31%	8.05%	12.16%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Harney Hospital

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$5,806,317	\$6,805,998
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,970,213)	(4,207,258)
Allocated pooled OPSRP UAL	541,464	468,522
Side account	0	0
Net unfunded pension actuarial accrued liability	2,377,568	3,067,262
Combined valuation payroll	7,657,953	6,647,333
Net pension UAL as a percentage of payroll	31%	46%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.84%)	(5.62%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$105,994	\$139,464
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$830,119	\$127,755	15.80%	\$873,317	\$137,984
Tier 2 General Service	10.57%	1,485,326	156,999	10.58%	1,459,211	154,385
Total General Service		2,315,445	284,754		2,332,528	292,369
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$2,315,445	\$284,754		\$2,332,528	\$292,369
Employer normal cost rate						
General Service			12.30%			12.53%
Police & Fire			16.51%			16.72%
Aggregate (Default)			12.30%			12.53%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$4,207,258)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(7.49%)
B. Actual employer payroll	3,563,665
C. Payment to transition liability/(surplus)	(266,919)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(7.14%)
B. Actual employer payroll	3,581,062
C. Payment to transition liability/(surplus)	(255,687)
4. Supplemental payment to transition liability	0
5. Interest	(285,561)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$3,970,213)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(3,970,213)	(4,207,258)
2. Combined valuation payroll	7,657,953	6,647,333
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(4.84%)	(5.62%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	7,657,953	6,647,333
3. Amortization factor	10.703	11.272
4. Total side account rate $(-1. \div 2. \div 3.)^1$	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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Portland, OR 97204-3654
503 227 0634

September 2014

Harrisburg Fire/Rescue/2819
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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



September 2014
Harrisburg Fire/Rescue/2819

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

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

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

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

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



September 2014
Harrisburg Fire/Rescue/2819

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Harrisburg Fire/Rescue -- #2819

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Harrisburg Fire/Rescue to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Harrisburg Fire/Rescue.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Harrisburg Fire/Rescue

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	15.63%	13.02%	15.63%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	(0.70%)	(0.70%)	(0.70%)	(0.70%)	(0.70%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	18.23%	15.62%	18.23%	9.93%	14.04%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	18.76%	16.15%	18.76%	10.38%	14.49%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Harrisburg Fire/Rescue

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$106,781	\$137,961
Allocated pre-SLGRP pooled liability/(surplus)	(27,208)	(26,699)
Transition liability/(surplus)	(10,543)	(10,694)
Allocated pooled OPSRP UAL	9,958	9,497
Side account	0	0
Net unfunded pension actuarial accrued liability	78,988	110,065
Combined valuation payroll	140,834	134,745
Net pension UAL as a percentage of payroll	56%	82%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	(0.70%)	(0.70%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,949	\$2,827
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		0	0		0	0
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	10,734	1,678	15.70%	7,009	1,100
Total Police & Fire		10,734	1,678		7,009	1,100
Total		\$10,734	\$1,678		\$7,009	\$1,100
Employer normal cost rate						
General Service			13.02%			13.34%
Police & Fire			15.63%			15.69%
Aggregate (Default)			15.63%			15.69%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$10,694)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(0.87%)
B. Actual employer payroll	64,238
C. Payment to transition liability/(surplus)	(559)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(0.52%)
B. Actual employer payroll	67,440
C. Payment to transition liability/(surplus)	(350)
4. Supplemental payment to transition liability	0
5. Interest	(758)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$10,543)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(10,543)	(10,694)
2. Combined valuation payroll	140,834	134,745
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(0.70%)	(0.70%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	140,834	134,745
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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September 2014

High Desert Parks & Recreation District/2838
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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



September 2014
High Desert Parks & Recreation District/2838

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

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

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

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

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



September 2014
High Desert Parks & Recreation District/2838

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

High Desert Parks & Recreation District -- #2838

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for High Desert Parks & Recreation District to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to High Desert Parks & Recreation District.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for High Desert Parks & Recreation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	10.57%	10.57%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	0.39%	0.39%	0.39%	0.39%	0.39%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	14.26%	14.26%	20.20%	11.02%	15.13%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	14.79%	14.79%	20.73%	11.47%	15.58%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

High Desert Parks & Recreation District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$19,036	\$24,993
Allocated pre-SLGRP pooled liability/(surplus)	(4,851)	(4,837)
Transition liability/(surplus)	1,045	1,062
Allocated pooled OPSRP UAL	1,775	1,720
Side account	0	0
Net unfunded pension actuarial accrued liability	17,005	22,938
Combined valuation payroll	25,107	24,410
Net pension UAL as a percentage of payroll	68%	94%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	0.39%	0.39%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$348	\$512
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	25,107	2,654	10.58%	24,410	2,583
Total General Service		25,107	2,654		24,410	2,583
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$25,107	\$2,654		\$24,410	\$2,583
Employer normal cost rate						
General Service			10.57%			10.58%
Police & Fire			16.51%			16.72%
Aggregate (Default)			10.57%			10.58%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$1,062
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	0.38%
B. Actual employer payroll	11,807
C. Payment to transition liability/(surplus)	45
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	0.39%
B. Actual employer payroll	12,161
C. Payment to transition liability/(surplus)	47
4. Supplemental payment to transition liability	0
5. Interest	75
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	\$1,045

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	1,045	1,062
2. Combined valuation payroll	25,107	24,410
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	0.39%	0.39%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	25,107	24,410
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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Portland, OR 97204-3654
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September 2014

Hood River County/2035
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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



September 2014
Hood River County/2035

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

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

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

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

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



September 2014
Hood River County/2035

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Hood River County -- #2035

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Hood River County to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Hood River County.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Hood River County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	13.13%	12.52%	16.53%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(4.25%)	(4.25%)	(4.25%)	(4.25%)	(4.25%)
Side account rate relief ²	(7.73%)	(7.73%)	(7.73%)	(7.73%)	(7.73%)
Net pension contribution rate	6.26%	5.65%	9.66%	0.46%	4.57%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	6.79%	6.18%	10.19%	0.91%	5.02%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Hood River County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$5,023,411	\$6,667,485
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,011,196)	(3,019,596)
Allocated pooled OPSRP UAL	468,455	458,987
Side account	5,480,428	5,002,793
Net unfunded pension actuarial accrued liability	(2,999,758)	(895,917)
Combined valuation payroll	6,625,378	6,512,049
Net pension UAL as a percentage of payroll	(45%)	(14%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.25%)	(4.11%)
Side account rate relief	(7.73%)	(6.82%)
Allocated pooled RHIA UAL	\$91,702	\$136,626
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$1,567,092	\$241,175	15.80%	\$1,663,381	\$262,814
Tier 2 General Service	10.57%	2,315,274	244,724	10.58%	2,440,421	258,197
Total General Service		3,882,366	485,899		4,103,802	521,011
Tier 1 Police & Fire	17.62%	319,888	56,364	17.89%	323,568	57,886
Tier 2 Police & Fire	15.63%	388,568	60,733	15.70%	363,902	57,133
Total Police & Fire		708,456	117,097		687,470	115,019
Total		\$4,590,822	\$602,996		\$4,791,272	\$636,030
Employer normal cost rate						
General Service			12.52%			12.70%
Police & Fire			16.53%			16.73%
Aggregate (Default)			13.13%			13.27%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$3,019,596)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(3.17%)
B. Actual employer payroll	3,175,543
C. Payment to transition liability/(surplus)	(100,665)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(3.92%)
B. Actual employer payroll	3,171,391
C. Payment to transition liability/(surplus)	(124,318)
4. Supplemental payment to transition liability	0
5. Interest	(216,583)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$3,011,196)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(3,011,196)	(3,019,596)
2. Combined valuation payroll	6,625,378	6,512,049
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(4.25%)	(4.11%)

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
1. Side account as of December 31, 2012	N/A	\$5,002,793	\$5,002,793
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(299,680)	(299,680)
5. Side account earnings during 2013		778,314	778,314
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)		\$5,480,428	\$5,480,428

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$5,480,428	\$5,002,793
Side Account 2	0	0
Side Account 3	0	0
Total	\$5,480,428	\$5,002,793

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$5,480,428	\$5,002,793
2. Combined valuation payroll	6,625,378	6,512,049
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	(7.73%)	(6.82%)

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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September 2014

Hoodland Fire District #74/2607
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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

September 2014
Hoodland Fire District #74/2607

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

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

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

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

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



September 2014
Hoodland Fire District #74/2607

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Hoodland Fire District #74 -- #2607

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Hoodland Fire District #74 to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Hoodland Fire District #74.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Hoodland Fire District #74

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	16.37%	10.57%	16.82%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	(1.75%)	(1.75%)	(1.75%)	(1.75%)	(1.75%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	17.92%	12.12%	18.37%	8.88%	12.99%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	18.45%	12.65%	18.90%	9.33%	13.44%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Hoodland Fire District #74

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$692,770	\$900,969
Allocated pre-SLGRP pooled liability/(surplus)	(176,521)	(174,362)
Transition liability/(surplus)	(171,175)	(179,253)
Allocated pooled OPSRP UAL	64,604	62,022
Side account	0	0
Net unfunded pension actuarial accrued liability	409,678	609,376
Combined valuation payroll	913,694	879,965
Net pension UAL as a percentage of payroll	45%	69%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	(1.75%)	(1.81%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$12,647	\$18,462
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	52,237	5,521	10.58%	53,177	5,626
Total General Service		52,237	5,521		53,177	5,626
Tier 1 Police & Fire	17.62%	400,937	70,645	17.89%	370,391	66,263
Tier 2 Police & Fire	15.63%	269,242	42,083	15.70%	257,325	40,400
Total Police & Fire		670,179	112,728		627,716	106,663
Total		\$722,416	\$118,249		\$680,893	\$112,289
Employer normal cost rate						
General Service			10.57%			10.58%
Police & Fire			16.82%			16.99%
Aggregate (Default)			16.37%			16.49%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$179,253)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(2.42%)
B. Actual employer payroll	416,719
C. Payment to transition liability/(surplus)	(10,085)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(2.26%)
B. Actual employer payroll	456,033
C. Payment to transition liability/(surplus)	(10,305)
4. Supplemental payment to transition liability	0
5. Interest	(12,312)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$171,175)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(171,175)	(179,253)
2. Combined valuation payroll	913,694	879,965
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(1.75%)	(1.81%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	913,694	879,965
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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September 2014

Horsefly Irrigation District/2510
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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



September 2014
Horsefly Irrigation District/2510

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

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

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

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

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



September 2014
Horsefly Irrigation District/2510

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Horsefly Irrigation District -- #2510

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Horsefly Irrigation District to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Horsefly Irrigation District.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Horsefly Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	13.66%	13.02%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	32.83%	32.83%	32.83%	32.83%	32.83%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	51.60%	50.96%	54.45%	45.27%	49.38%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	52.13%	51.49%	54.98%	45.72%	49.83%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Horsefly Irrigation District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$10,196	\$47,751
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	47,245	48,114
Allocated pooled OPSRP UAL	951	3,287
Side account	0	0
Net unfunded pension actuarial accrued liability	58,392	99,152
Combined valuation payroll	13,447	46,638
Net pension UAL as a percentage of payroll	434%	213%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	32.83%	9.15%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$186	\$978
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		0	0		0	0
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$0	\$0		\$0	\$0
Employer normal cost rate						
General Service			13.02%			13.34%
Police & Fire			16.51%			16.72%
Aggregate (Default)			13.66%			13.93%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$48,114
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	5.22%
B. Actual employer payroll	37,575
C. Payment to transition liability/(surplus)	1,961
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	8.91%
B. Actual employer payroll	25,875
C. Payment to transition liability/(surplus)	2,306
4. Supplemental payment to transition liability	0
5. Interest	3,398
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	\$47,245

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	47,245	48,114
2. Combined valuation payroll	13,447	46,638
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	32.83%	9.15%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	13,447	46,638
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

September 2014

Housing Authority of Jackson County/2773
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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September 2014
Housing Authority of Jackson County/2773

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

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

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

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

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



September 2014
Housing Authority of Jackson County/2773

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Housing Authority of Jackson County -- #2773

September 2014

CONTENTS

Executive Summary	1
<i>Employer Contribution Rates</i>	2
<i>Accounting Information</i>	4
<i>Principal Valuation Results</i>	6
▪ Employer	6
▪ SLGRP	7
▪ OPSRP	8
▪ Retiree Healthcare	9
Weighted Average Tier 1/Tier 2 Normal Cost	10
Transition Liability Information	11
Side Account Information	12
Brief Summary of Actuarial Methods and Assumptions	14
Brief Summary of Changes in Plan Provisions	16
Glossary	17

Executive Summary

Milliman has prepared this report for Housing Authority of Jackson County to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Housing Authority of Jackson County.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Housing Authority of Jackson County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	11.73%	11.73%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	1.68%	1.68%	1.68%	1.68%	1.68%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	16.71%	16.71%	21.49%	12.31%	16.42%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	17.24%	17.24%	22.02%	12.76%	16.87%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Housing Authority of Jackson County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$1,924,071	\$2,404,443
Allocated pre-SLGRP pooled liability/(surplus)	(490,262)	(465,325)
Transition liability/(surplus)	456,647	472,535
Allocated pooled OPSRP UAL	179,428	165,521
Side account	0	0
Net unfunded pension actuarial accrued liability	2,069,884	2,577,174
Combined valuation payroll	2,537,657	2,348,389
Net pension UAL as a percentage of payroll	82%	110%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	1.68%	1.79%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$35,124	\$49,270
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$327,328	\$50,376	15.80%	\$316,091	\$49,942
Tier 2 General Service	10.57%	1,027,931	108,652	10.58%	984,017	104,109
Total General Service		1,355,259	159,028		1,300,108	154,051
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$1,355,259	\$159,028		\$1,300,108	\$154,051
Employer normal cost rate						
General Service			11.73%			11.85%
Police & Fire			16.51%			16.72%
Aggregate (Default)			11.73%			11.85%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$472,535
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	2.01%
B. Actual employer payroll	1,249,631
C. Payment to transition liability/(surplus)	25,118
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	1.83%
B. Actual employer payroll	1,290,436
C. Payment to transition liability/(surplus)	23,615
4. Supplemental payment to transition liability	0
5. Interest	32,845
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	\$456,647

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	456,647	472,535
2. Combined valuation payroll	2,537,657	2,348,389
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	1.68%	1.79%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	2,537,657	2,348,389
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

September 2014

Hubbard Rural Fire Protection District/2829
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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



September 2014
Hubbard Rural Fire Protection District/2829

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

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

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

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

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



September 2014
Hubbard Rural Fire Protection District/2829

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Hubbard Rural Fire Protection District -- #2829

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

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

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Hubbard Rural Fire Protection District.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Hubbard Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	13.66%	13.02%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(11.78%)	(11.78%)	(11.78%)	(11.78%)	(11.78%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	6.99%	6.35%	9.84%	0.66%	4.77%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	7.52%	6.88%	10.37%	1.11%	5.22%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Hubbard Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$41,689	\$61,605
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(69,337)	(71,633)
Allocated pooled OPSRP UAL	3,888	4,241
Side account	0	0
Net unfunded pension actuarial accrued liability	(23,760)	(5,787)
Combined valuation payroll	54,983	60,169
Net pension UAL as a percentage of payroll	(43%)	(10%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(11.78%)	(10.56%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$761	\$1,262
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		0	0		0	0
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$0	\$0		\$0	\$0
Employer normal cost rate						
General Service			13.02%			13.34%
Police & Fire			16.51%			16.72%
Aggregate (Default)			13.66%			13.93%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$71,633)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(14.96%)
B. Actual employer payroll	23,719
C. Payment to transition liability/(surplus)	(3,548)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(13.12%)
B. Actual employer payroll	28,463
C. Payment to transition liability/(surplus)	(3,735)
4. Supplemental payment to transition liability	0
5. Interest	(4,987)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$69,337)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(69,337)	(71,633)
2. Combined valuation payroll	54,983	60,169
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(11.78%)	(10.56%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	54,983	60,169
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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



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Portland, OR 97204-3654
503 227 0634

September 2014

Illinois Valley Fire District/2564
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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



September 2014
Illinois Valley Fire District/2564

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

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

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

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

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



September 2014
Illinois Valley Fire District/2564

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Illinois Valley Fire District -- #2564

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Illinois Valley Fire District to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Illinois Valley Fire District.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Illinois Valley Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	15.63%	13.02%	15.63%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(10.54%)	(10.54%)	(10.54%)	(10.54%)	(10.54%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	10.20%	7.59%	10.20%	1.90%	6.01%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	10.73%	8.12%	10.73%	2.35%	6.46%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Illinois Valley Fire District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$290,618	\$269,091
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(477,744)	(492,162)
Allocated pooled OPSRP UAL	27,101	18,524
Side account	0	0
Net unfunded pension actuarial accrued liability	(160,025)	(204,547)
Combined valuation payroll	383,296	262,818
Net pension UAL as a percentage of payroll	(42%)	(78%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.54%)	(15.17%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$5,305	\$5,514
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		0	0		0	0
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	75,381	11,782	15.70%	69,540	10,918
Total Police & Fire		75,381	11,782		69,540	10,918
Total		\$75,381	\$11,782		\$69,540	\$10,918
Employer normal cost rate						
General Service			13.02%			13.34%
Police & Fire			15.63%			15.70%
Aggregate (Default)			15.63%			15.70%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$492,162)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(15.23%)
B. Actual employer payroll	159,862
C. Payment to transition liability/(surplus)	(24,347)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(15.23%)
B. Actual employer payroll	175,193
C. Payment to transition liability/(surplus)	(24,433)
4. Supplemental payment to transition liability	0
5. Interest	(34,362)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	(\$477,744)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(477,744)	(492,162)
2. Combined valuation payroll	383,296	262,818
3. Regular amortization factor	11.820	12.348
4. Total transition liability/(surplus) rate	(10.54%)	(15.17%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	383,296	262,818
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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September 2014

Imbler Rural Fire Protection District/2651
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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September 2014
Imbler Rural Fire Protection District/2651

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

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

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

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

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



September 2014
Imbler Rural Fire Protection District/2651

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Imbler Rural Fire Protection District -- #2651

September 2014

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CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

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

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Imbler Rural Fire Protection District.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Imbler Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	17.62%	13.02%	17.62%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	0.65%	0.65%	0.65%	0.65%	0.65%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	21.57%	16.97%	21.57%	11.28%	15.39%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	22.10%	17.50%	22.10%	11.73%	15.84%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Imbler Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$21,810	\$28,066
Allocated pre-SLGRP pooled liability/(surplus)	(5,557)	(5,432)
Transition liability/(surplus)	2,011	3,235
Allocated pooled OPSRP UAL	2,034	1,932
Side account	0	0
Net unfunded pension actuarial accrued liability	20,298	27,801
Combined valuation payroll	28,765	27,412
Net pension UAL as a percentage of payroll	71%	101%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	0.65%	1.05%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$398	\$575
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		0	0		0	0
Tier 1 Police & Fire	17.62%	10,610	1,869	17.89%	10,612	1,898
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		10,610	1,869		10,612	1,898
Total		\$10,610	\$1,869		\$10,612	\$1,898
Employer normal cost rate						
General Service			13.02%			13.34%
Police & Fire			17.62%			17.89%
Aggregate (Default)			17.62%			17.89%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$3,235
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	7.93%
B. Actual employer payroll	13,026
C. Payment to transition liability/(surplus)	1,033
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	2.34%
B. Actual employer payroll	14,347
C. Payment to transition liability/(surplus)	336
4. Supplemental payment to transition liability	0
5. Interest	145
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	\$2,011

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	2,011	3,235
2. Combined valuation payroll	28,765	27,412
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	0.65%	1.05%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	28,765	27,412
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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Milliman
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Portland, OR 97204-3654
503 227 0634

September 2014

Jackson County Fire District #3/2715
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

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

Contents of Report

The executive summary provides the basic information you need including:

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

The remainder of the report provides additional information including:

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

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

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



September 2014
Jackson County Fire District #3/2715

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

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

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

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

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



September 2014
Jackson County Fire District #3/2715

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

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

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

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

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

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

Sincerely,

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

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

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

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County Fire District #3 -- #2715

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Jackson County Fire District #3 to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County Fire District #3.

Executive Summary

Employer Contribution Rates

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

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Jackson County Fire District #3

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	16.16%	10.57%	16.36%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	(5.82%)	(5.82%)	(5.82%)	(5.82%)	(5.82%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	13.64%	8.05%	13.84%	4.81%	8.92%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	14.17%	8.58%	14.37%	5.26%	9.37%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

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

Executive Summary

Accounting Information

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

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

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

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

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

Jackson County Fire District #3

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$4,783,023	\$5,602,959
Allocated pre-SLGRP pooled liability/(surplus)	(1,218,736)	(1,084,324)
Transition liability/(surplus)	(3,930,109)	(4,042,363)
Allocated pooled OPSRP UAL	446,037	385,706
Side account	0	0
Net unfunded pension actuarial accrued liability	80,215	861,978
Combined valuation payroll	6,308,330	5,472,340
Net pension UAL as a percentage of payroll	1%	16%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	(5.82%)	(6.55%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$87,314	\$114,812
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

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

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

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

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

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

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

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

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	128,163	13,547	10.58%	123,396	13,055
Total General Service		128,163	13,547		123,396	13,055
Tier 1 Police & Fire	17.62%	1,310,837	230,969	17.89%	1,408,219	251,930
Tier 2 Police & Fire	15.63%	2,265,821	354,148	15.70%	2,165,973	340,058
Total Police & Fire		3,576,658	585,117		3,574,192	591,988
Total		\$3,704,821	\$598,664		\$3,697,588	\$605,043
Employer normal cost rate						
General Service			10.57%			10.58%
Police & Fire			16.36%			16.56%
Aggregate (Default)			16.16%			16.36%

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

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

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

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$4,042,363)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(6.71%)
B. Actual employer payroll	2,810,603
C. Payment to transition liability/(surplus)	(188,591)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(6.94%)
B. Actual employer payroll	2,973,173
C. Payment to transition liability/(surplus)	(206,339)
4. Supplemental payment to transition liability	0
5. Interest	(282,676)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$3,930,109)

Development of Transition Liability or Surplus Rate

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

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(3,930,109)	(4,042,363)
2. Combined valuation payroll	6,308,330	5,472,340
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(5.82%)	(6.55%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	6,308,330	5,472,340
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

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

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

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

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

Economic Assumptions

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

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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September 2014

Jackson County Fire District #4/2620
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Jackson County Fire District #4/2620

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Jackson County Fire District #4/2620

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County Fire District #4 -- #2620

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Jackson County Fire District #4 to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County Fire District #4.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Jackson County Fire District #4

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	17.62%	13.02%	17.62%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	22.73%	18.13%	22.73%	12.44%	16.55%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	23.26%	18.66%	23.26%	12.89%	17.00%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jackson County Fire District #4

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$208,465	\$318,058
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	19,440	21,895
Side account	0	0
Net unfunded pension actuarial accrued liability	227,905	339,953
Combined valuation payroll	274,945	310,643
Net pension UAL as a percentage of payroll	83%	109%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$3,806	\$6,517
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		0	0		0	0
Tier 1 Police & Fire	17.62%	182,657	32,184	17.89%	230,411	41,221
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		182,657	32,184		230,411	41,221
Total		\$182,657	\$32,184		\$230,411	\$41,221
Employer normal cost rate						
General Service			13.02%			13.34%
Police & Fire			17.62%			17.89%
Aggregate (Default)			17.62%			17.89%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$0
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	\$0

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	274,945	310,643
3. Regular amortization factor	0.000	11.272
4. Total transition liability/(surplus) rate	0.00%	0.00%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	274,945	310,643
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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September 2014

Jackson County Vector Control District/2541
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Jackson County Vector Control District/2541

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Jackson County Vector Control District/2541

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County Vector Control District -- #2541

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Jackson County Vector Control District to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County Vector Control District.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Jackson County Vector Control District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	15.39%	15.39%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(3.15%)	(3.15%)	(3.15%)	(3.15%)	(3.15%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	17.35%	17.35%	18.47%	9.29%	13.40%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	17.88%	17.88%	19.00%	9.74%	13.85%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jackson County Vector Control District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$146,524	\$128,433
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(65,149)	(66,352)
Allocated pooled OPSRP UAL	13,664	8,841
Side account	0	0
Net unfunded pension actuarial accrued liability	95,039	70,922
Combined valuation payroll	193,251	125,439
Net pension UAL as a percentage of payroll	49%	57%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.15%)	(4.69%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$2,675	\$2,632
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$127,364	\$19,601	15.80%	\$125,439	\$19,819
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		127,364	19,601		125,439	19,819
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$127,364	\$19,601		\$125,439	\$19,819
Employer normal cost rate						
General Service			15.39%			15.80%
Police & Fire			16.51%			16.72%
Aggregate (Default)			15.39%			15.80%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$66,352)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(3.46%)
B. Actual employer payroll	82,790
C. Payment to transition liability/(surplus)	(2,865)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(2.82%)
B. Actual employer payroll	107,239
C. Payment to transition liability/(surplus)	(3,024)
4. Supplemental payment to transition liability	0
5. Interest	(4,686)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	(\$65,149)

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(65,149)	(66,352)
2. Combined valuation payroll	193,251	125,439
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(3.15%)	(4.69%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	193,251	125,439
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

September 2014

Jackson County/2005
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.



September 2014
Jackson County/2005

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Jackson County/2005

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County -- #2005

September 2014

Secondary Employers

2133 City Of Medford Library

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Jackson County to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Jackson County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	13.93%	12.96%	16.43%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief ²	(1.66%)	(1.66%)	(1.66%)	(1.66%)	(1.66%)
Net pension contribution rate	15.57%	14.60%	18.07%	8.97%	13.08%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	16.10%	15.13%	18.60%	9.42%	13.53%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jackson County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$34,557,174	\$48,080,236
Allocated pre-SLGRP pooled liability/(surplus)	(8,805,322)	(9,304,825)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	3,222,604	3,309,825
Side account	8,076,828	7,510,865
Net unfunded pension actuarial accrued liability	20,897,628	34,574,371
Combined valuation payroll	45,577,462	46,959,364
Net pension UAL as a percentage of payroll	46%	74%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	(1.66%)	(1.42%)
Allocated pooled RHIA UAL	\$630,841	\$985,227
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$9,340,119	\$1,437,444	15.80%	\$9,878,157	\$1,560,749
Tier 2 General Service	10.57%	9,479,223	1,001,954	10.58%	10,155,580	1,074,460
Total General Service		18,819,342	2,439,398		20,033,737	2,635,209
Tier 1 Police & Fire	17.62%	2,937,762	517,634	17.89%	3,237,199	579,135
Tier 2 Police & Fire	15.63%	4,370,076	683,043	15.70%	4,487,578	704,550
Total Police & Fire		7,307,838	1,200,677		7,724,777	1,283,685
Total		\$26,127,180	\$3,640,075		\$27,758,514	\$3,918,894
Employer normal cost rate						
General Service			12.96%			13.15%
Police & Fire			16.43%			16.62%
Aggregate (Default)			13.93%			14.12%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$0
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	\$0

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	45,577,462	46,959,364
3. Regular amortization factor	0.000	11.272
4. Total transition liability/(surplus) rate	0.00%	0.00%

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
1. Side account as of December 31, 2012	N/A	\$7,510,865	\$7,510,865
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(588,622)	(588,622)
5. Side account earnings during 2013		1,155,585	1,155,585
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)		\$8,076,828	\$8,076,828

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$8,076,828	\$7,510,865
Side Account 2	0	0
Side Account 3	0	0
Total	\$8,076,828	\$7,510,865

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$8,076,828	\$7,510,865
2. Combined valuation payroll	45,577,462	46,959,364
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	(1.66%)	(1.42%)

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

September 2014

Jefferson County EMS/2712
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.



September 2014
Jefferson County EMS/2712

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Jefferson County EMS/2712

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jefferson County EMS -- #2712

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Jefferson County EMS to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jefferson County EMS.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Jefferson County EMS

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	10.65%	10.65%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	0.63%	0.63%	0.63%	0.63%	0.63%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	14.58%	14.58%	20.44%	11.26%	15.37%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	15.11%	15.11%	20.97%	11.71%	15.82%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jefferson County EMS

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$201,253	\$324,373
Allocated pre-SLGRP pooled liability/(surplus)	(51,280)	(62,775)
Transition liability/(surplus)	17,906	17,974
Allocated pooled OPSRP UAL	18,768	22,330
Side account	0	0
Net unfunded pension actuarial accrued liability	186,647	301,902
Combined valuation payroll	265,432	316,811
Net pension UAL as a percentage of payroll	70%	95%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	0.63%	0.50%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$3,674	\$6,647
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$2,092	\$322	15.80%	\$80,908	\$12,783
Tier 2 General Service	10.57%	128,305	13,562	10.58%	122,372	12,947
Total General Service		130,397	13,884		203,280	25,730
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$130,397	\$13,884		\$203,280	\$25,730
Employer normal cost rate						
General Service			10.65%			12.66%
Police & Fire			16.51%			16.72%
Aggregate (Default)			10.65%			12.66%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$17,974
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	0.48%
B. Actual employer payroll	144,686
C. Payment to transition liability/(surplus)	694
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	0.45%
B. Actual employer payroll	147,082
C. Payment to transition liability/(surplus)	662
4. Supplemental payment to transition liability	0
5. Interest	1,288
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	\$17,906

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	17,906	17,974
2. Combined valuation payroll	265,432	316,811
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	0.63%	0.50%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	265,432	316,811
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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Portland, OR 97204-3654
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September 2014

Jefferson County Library District/2846
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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September 2014
Jefferson County Library District/2846

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Jefferson County Library District/2846

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jefferson County Library District -- #2846

September 2014

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CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Jefferson County Library District to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jefferson County Library District.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Jefferson County Library District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	11.03%	11.03%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	15.52%	15.52%	21.00%	11.82%	15.93%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	16.05%	16.05%	21.53%	12.27%	16.38%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jefferson County Library District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$143,600	\$189,325
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(12,510)	(12,766)
Allocated pooled OPSRP UAL	13,391	13,033
Side account	0	0
Net unfunded pension actuarial accrued liability	144,481	189,592
Combined valuation payroll	189,394	184,911
Net pension UAL as a percentage of payroll	76%	103%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.62%)	(0.61%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$2,621	\$3,880
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$10,712	\$1,649	15.80%	\$10,561	\$1,669
Tier 2 General Service	10.57%	101,096	10,686	10.58%	98,507	10,422
Total General Service		111,808	12,335		109,068	12,091
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$111,808	\$12,335		\$109,068	\$12,091
Employer normal cost rate						
General Service			11.03%			11.09%
Police & Fire			16.51%			16.72%
Aggregate (Default)			11.03%			11.09%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$12,766)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(0.77%)
B. Actual employer payroll	90,469
C. Payment to transition liability/(surplus)	(697)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(0.51%)
B. Actual employer payroll	90,163
C. Payment to transition liability/(surplus)	(459)
4. Supplemental payment to transition liability	0
5. Interest	(900)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	(\$12,510)

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(12,510)	(12,766)
2. Combined valuation payroll	189,394	184,911
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(0.62%)	(0.61%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	189,394	184,911
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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September 2014

Jefferson Rural Fire Protection District/2561
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014

Jefferson Rural Fire Protection District/2561

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Jefferson Rural Fire Protection District/2561

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jefferson Rural Fire Protection District -- #2561

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Jefferson Rural Fire Protection District to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jefferson Rural Fire Protection District.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Jefferson Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	15.47%	13.42%	16.67%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(10.24%)	(10.24%)	(10.24%)	(10.24%)	(10.24%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	10.34%	8.29%	11.54%	2.20%	6.31%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	10.87%	8.82%	12.07%	2.65%	6.76%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jefferson Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$293,203	\$380,640
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(423,859)	(434,137)
Allocated pooled OPSRP UAL	27,342	26,203
Side account	0	0
Net unfunded pension actuarial accrued liability	(103,314)	(27,294)
Combined valuation payroll	386,706	371,766
Net pension UAL as a percentage of payroll	(27%)	(7%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.24%)	(10.36%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$5,352	\$7,800
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$61,445	\$9,456	15.80%	\$17,331	\$2,738
Tier 2 General Service	10.57%	42,453	4,487	10.58%	40,442	4,279
Total General Service		103,898	13,943		57,773	7,017
Tier 1 Police & Fire	17.62%	92,881	16,366	17.89%	88,075	15,757
Tier 2 Police & Fire	15.63%	85,368	13,343	15.70%	82,165	12,900
Total Police & Fire		178,249	29,709		170,240	28,657
Total		\$282,147	\$43,652		\$228,013	\$35,674
Employer normal cost rate						
General Service			13.42%			12.15%
Police & Fire			16.67%			16.83%
Aggregate (Default)			15.47%			15.65%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$434,137)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(9.02%)
B. Actual employer payroll	184,936
C. Payment to transition liability/(surplus)	(16,681)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(12.64%)
B. Actual employer payroll	191,645
C. Payment to transition liability/(surplus)	(24,083)
4. Supplemental payment to transition liability	0
5. Interest	(30,486)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	(\$423,859)

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(423,859)	(434,137)
2. Combined valuation payroll	386,706	371,766
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(10.24%)	(10.36%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	386,706	371,766
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

September 2014

Josephine County/2042
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.



September 2014
Josephine County/2042

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Josephine County/2042

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Josephine County -- #2042

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Josephine County to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Josephine County.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Josephine County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	13.53%	12.63%	16.17%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	0.23%	0.23%	0.23%	0.23%	0.23%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	17.06%	16.16%	19.70%	10.86%	14.97%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	17.59%	16.69%	20.23%	11.31%	15.42%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Josephine County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$10,168,185	\$15,309,203
Allocated pre-SLGRP pooled liability/(surplus)	(2,590,899)	(2,962,745)
Transition liability/(surplus)	333,346	329,966
Allocated pooled OPSRP UAL	948,227	1,053,880
Side account	0	0
Net unfunded pension actuarial accrued liability	8,858,859	13,730,304
Combined valuation payroll	13,410,821	14,952,307
Net pension UAL as a percentage of payroll	66%	92%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	0.23%	0.20%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$185,620	\$313,706
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$2,672,972	\$411,370	15.80%	\$2,836,018	\$448,091
Tier 2 General Service	10.57%	3,583,325	378,757	10.58%	4,285,396	453,395
Total General Service		6,256,297	790,127		7,121,414	901,486
Tier 1 Police & Fire	17.62%	574,894	101,296	17.89%	566,752	101,392
Tier 2 Police & Fire	15.63%	1,557,831	243,489	15.70%	1,677,776	263,411
Total Police & Fire		2,132,725	344,785		2,244,528	364,803
Total		\$8,389,022	\$1,134,912		\$9,365,942	\$1,266,289
Employer normal cost rate						
General Service			12.63%			12.66%
Police & Fire			16.17%			16.25%
Aggregate (Default)			13.53%			13.52%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$329,966
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	0.15%
B. Actual employer payroll	6,858,097
C. Payment to transition liability/(surplus)	10,287
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	0.15%
B. Actual employer payroll	6,872,291
C. Payment to transition liability/(surplus)	10,309
4. Supplemental payment to transition liability	0
5. Interest	23,976
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	\$333,346

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	333,346	329,966
2. Combined valuation payroll	13,410,821	14,952,307
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	0.23%	0.20%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	13,410,821	14,952,307
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654
503 227 0634

September 2014

Junction City Fire Department/2763
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Junction City Fire Department/2763

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Junction City Fire Department/2763

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Junction City Fire Department -- #2763

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Junction City Fire Department to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Junction City Fire Department.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Junction City Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	15.67%	10.57%	16.42%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(3.60%)	(3.60%)	(3.60%)	(3.60%)	(3.60%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	17.18%	12.08%	17.93%	8.84%	12.95%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	17.71%	12.61%	18.46%	9.29%	13.40%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Junction City Fire Department

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$193,780	\$184,674
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(98,514)	(99,090)
Allocated pooled OPSRP UAL	18,071	12,713
Side account	0	0
Net unfunded pension actuarial accrued liability	113,337	98,297
Combined valuation payroll	255,576	180,369
Net pension UAL as a percentage of payroll	44%	55%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.60%)	(4.87%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$3,537	\$3,784
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	27,223	2,877	10.58%	24,694	2,613
Total General Service		27,223	2,877		24,694	2,613
Tier 1 Police & Fire	17.62%	73,853	13,013	17.89%	67,600	12,094
Tier 2 Police & Fire	15.63%	113,267	17,704	15.70%	52,272	8,207
Total Police & Fire		187,120	30,717		119,872	20,301
Total		\$214,343	\$33,594		\$144,566	\$22,914
Employer normal cost rate						
General Service			10.57%			10.58%
Police & Fire			16.42%			16.94%
Aggregate (Default)			15.67%			15.85%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$99,090)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(3.57%)
B. Actual employer payroll	88,314
C. Payment to transition liability/(surplus)	(3,153)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(3.67%)
B. Actual employer payroll	122,850
C. Payment to transition liability/(surplus)	(4,509)
4. Supplemental payment to transition liability	0
5. Interest	(7,086)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$98,514)

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(98,514)	(99,090)
2. Combined valuation payroll	255,576	180,369
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(3.60%)	(4.87%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	255,576	180,369
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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September 2014

Keizer Fire Department/2559
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Keizer Fire Department/2559

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Keizer Fire Department/2559

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Keizer Fire Department -- #2559

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Keizer Fire Department to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Keizer Fire Department.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Keizer Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	16.27%	15.39%	16.34%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(5.57%)	(5.57%)	(5.57%)	(5.57%)	(5.57%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	15.81%	14.93%	15.88%	6.87%	10.98%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	16.34%	15.46%	16.41%	7.32%	11.43%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Keizer Fire Department

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$1,602,862	\$1,923,444
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,259,473)	(1,295,516)
Allocated pooled OPSRP UAL	149,474	132,409
Side account	0	0
Net unfunded pension actuarial accrued liability	492,863	760,337
Combined valuation payroll	2,114,015	1,878,604
Net pension UAL as a percentage of payroll	23%	40%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.57%)	(6.12%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$29,260	\$39,414
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$64,686	\$9,955	15.80%	\$71,524	\$11,301
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		64,686	9,955		71,524	11,301
Tier 1 Police & Fire	17.62%	310,264	54,669	17.89%	304,107	54,405
Tier 2 Police & Fire	15.63%	564,322	88,204	15.70%	484,161	76,013
Total Police & Fire		874,586	142,873		788,268	130,418
Total		\$939,272	\$152,828		\$859,792	\$141,719
Employer normal cost rate						
General Service			15.39%			15.80%
Police & Fire			16.34%			16.54%
Aggregate (Default)			16.27%			16.48%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$1,295,516)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(6.64%)
B. Actual employer payroll	974,486
C. Payment to transition liability/(surplus)	(64,706)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(6.01%)
B. Actual employer payroll	1,030,374
C. Payment to transition liability/(surplus)	(61,926)
4. Supplemental payment to transition liability	0
5. Interest	(90,589)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	(\$1,259,473)

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(1,259,473)	(1,295,516)
2. Combined valuation payroll	2,114,015	1,878,604
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(5.57%)	(6.12%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	2,114,015	1,878,604
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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September 2014

Klamath Community College/2906
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Klamath Community College/2906

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Klamath Community College/2906

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath Community College -- #2906

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Klamath Community College to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath Community College.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Klamath Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	12.80%	12.80%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate ²	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief ²	(0.80%)	(0.80%)	(0.80%)	(0.80%)	(0.80%)
Net pension contribution rate	18.96%	18.96%	22.67%	13.49%	17.60%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	19.49%	19.49%	23.20%	13.94%	18.05%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath Community College

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$3,530,726	\$4,478,717
Allocated pre-SLGRP pooled liability/(surplus)	921,374	912,001
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	329,255	308,313
Side account	397,960	382,718
Net unfunded pension actuarial accrued liability	4,383,395	5,316,313
Combined valuation payroll	4,656,675	4,374,307
Net pension UAL as a percentage of payroll	94%	122%
Pre-SLGRP pooled rate	1.85%	1.85%
Transition rate	0.00%	0.00%
Side account rate relief	(0.80%)	(0.78%)
Allocated pooled RHIA UAL	\$64,453	\$91,775
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$101,323,810	\$15,593,734	15.80%	\$115,698,503	\$18,280,363
Tier 2 General Service	10.57%	117,604,426	12,430,788	10.58%	119,603,929	12,654,096
Total General Service		218,928,236	28,024,522		235,302,432	30,934,459
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$218,928,236	\$28,024,522		\$235,302,432	\$30,934,459
Employer normal cost rate						
General Service			12.80%			13.15%
Police & Fire			16.51%			16.72%
Aggregate (Default)			12.80%			13.15%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$0
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	\$0

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	408,769,564	413,167,858
3. Regular amortization factor	0.000	11.272
4. Total transition liability/(surplus) rate	0.00%	0.00%

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
1. Side account as of December 31, 2012	N/A	\$382,718	\$382,718
2. Deposits during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(41,751)	(41,751)
5. Side account earnings during 2013		57,993	57,993
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)		\$397,960	\$397,960

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	\$397,960	\$382,718
Side Account 2	0	0
Side Account 3	0	0
Total	\$397,960	\$382,718

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$397,960	\$382,718
2. Combined valuation payroll	4,656,675	4,374,307
3. Amortization factor	10.703	11.272
4. Total side account rate $(-1. \div 2. \div 3.)^1$	(0.80%)	(0.78%)

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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September 2014

Klamath County Emergency Communications District/2710
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Klamath County Emergency Communications District/2710

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Klamath County Emergency Communications District/2710

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath County Emergency Communications District -- #2710

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Klamath County Emergency Communications District to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath County Emergency Communications District.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Klamath County Emergency Communications District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	12.81%	12.81%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	1.71%	1.71%	1.71%	1.71%	1.71%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	17.82%	17.82%	21.52%	12.34%	16.45%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	18.35%	18.35%	22.05%	12.79%	16.90%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath County Emergency Communications District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$475,721	\$703,668
Allocated pre-SLGRP pooled liability/(surplus)	(121,216)	(136,179)
Transition liability/(surplus)	114,517	114,769
Allocated pooled OPSRP UAL	44,363	48,440
Side account	0	0
Net unfunded pension actuarial accrued liability	513,385	730,698
Combined valuation payroll	627,428	687,264
Net pension UAL as a percentage of payroll	82%	106%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	1.71%	1.48%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$8,684	\$14,419
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$108,032	\$16,626	15.80%	\$113,986	\$18,010
Tier 2 General Service	10.57%	124,162	13,124	10.58%	107,860	11,412
Total General Service		232,194	29,750		221,846	29,422
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$232,194	\$29,750		\$221,846	\$29,422
Employer normal cost rate						
General Service			12.81%			13.26%
Police & Fire			16.51%			16.72%
Aggregate (Default)			12.81%			13.26%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$114,769
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	1.50%
B. Actual employer payroll	286,027
C. Payment to transition liability/(surplus)	4,290
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	1.48%
B. Actual employer payroll	283,657
C. Payment to transition liability/(surplus)	4,199
4. Supplemental payment to transition liability	0
5. Interest	8,237
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	\$114,517

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	114,517	114,769
2. Combined valuation payroll	627,428	687,264
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	1.71%	1.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	627,428	687,264
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

September 2014

Klamath County/2007
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.



September 2014
Klamath County/2007

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Klamath County/2007

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath County -- #2007

September 2014

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Klamath County to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath County.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Klamath County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	16.33%	13.02%	16.33%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(15.98%)	(15.98%)	(15.98%)	(15.98%)	(15.98%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	5.46%	2.15%	5.46%	0.00%	0.57%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	5.99%	2.68%	5.99%	0.45%	1.02%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$2,653,508	\$3,821,811
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(5,987,286)	(6,032,516)
Allocated pooled OPSRP UAL	247,451	263,092
Side account	0	0
Net unfunded pension actuarial accrued liability	(3,086,327)	(1,947,613)
Combined valuation payroll	3,499,712	3,732,715
Net pension UAL as a percentage of payroll	(88%)	(52%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(15.98%)	(14.34%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$48,440	\$78,314
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$0	\$0	15.80%	\$0	\$0
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		0	0		0	0
Tier 1 Police & Fire	17.62%	818,281	144,181	17.89%	1,038,251	185,743
Tier 2 Police & Fire	15.63%	1,504,681	235,182	15.70%	1,662,466	261,007
Total Police & Fire		2,322,962	379,363		2,700,717	446,750
Total		\$2,322,962	\$379,363		\$2,700,717	\$446,750
Employer normal cost rate						
General Service			13.02%			13.34%
Police & Fire			16.33%			16.54%
Aggregate (Default)			16.33%			16.54%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$6,032,516)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(11.05%)
B. Actual employer payroll	1,766,197
C. Payment to transition liability/(surplus)	(195,165)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(17.41%)
B. Actual employer payroll	1,677,916
C. Payment to transition liability/(surplus)	(280,705)
4. Supplemental payment to transition liability	0
5. Interest	(430,640)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	(\$5,987,286)

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(5,987,286)	(6,032,516)
2. Combined valuation payroll	3,499,712	3,732,715
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(15.98%)	(14.34%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	3,499,712	3,732,715
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654
503 227 0634

September 2014

Klamath Housing Authority/2721
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Klamath Housing Authority/2721

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Klamath Housing Authority/2721

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath Housing Authority -- #2721

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Klamath Housing Authority to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath Housing Authority.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Klamath Housing Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	13.05%	13.05%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate ²	(3.74%)	(3.74%)	(3.74%)	(3.74%)	(3.74%)
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	14.42%	14.42%	17.88%	8.70%	12.81%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	14.95%	14.95%	18.41%	9.15%	13.26%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath Housing Authority

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$406,102	\$559,254
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(214,493)	(217,457)
Allocated pooled OPSRP UAL	37,871	38,499
Side account	0	0
Net unfunded pension actuarial accrued liability	229,480	380,296
Combined valuation payroll	535,608	546,216
Net pension UAL as a percentage of payroll	43%	70%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.74%)	(3.53%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$7,413	\$11,460
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$100,251	\$15,429	15.80%	\$97,324	\$15,377
Tier 2 General Service	10.57%	94,833	10,024	10.58%	82,690	8,749
Total General Service		195,084	25,453		180,014	24,126
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$195,084	\$25,453		\$180,014	\$24,126
Employer normal cost rate						
General Service			13.05%			13.40%
Police & Fire			16.51%			16.72%
Aggregate (Default)			13.05%			13.40%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	(\$217,457)
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	(3.44%)
B. Actual employer payroll	238,355
C. Payment to transition liability/(surplus)	(8,199)
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	(3.44%)
B. Actual employer payroll	296,304
C. Payment to transition liability/(surplus)	(10,193)
4. Supplemental payment to transition liability	0
5. Interest	(15,428)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
<i>(1. - 2C. - 3C. - 4. + 5. + 6.)</i>	(\$214,493)

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	(214,493)	(217,457)
2. Combined valuation payroll	535,608	546,216
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	(3.74%)	(3.53%)

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	535,608	546,216
3. Amortization factor	10.703	11.272
4. Total side account rate $(-1. \div 2. \div 3.)^1$	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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Portland, OR 97204-3654
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September 2014

Klamath Vector Control/2624
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2013. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2015. Information is also provided to assist you in preparing your required financial reporting disclosures under Statement 45 of the Governmental Accounting Standards Board.

This report reflects the System's benefit provisions in effect as of December 31, 2013. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



September 2014
Klamath Vector Control/2624

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



September 2014
Klamath Vector Control/2624

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Larrabee".

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read "Scott D. Preppernau".

Scott D. Preppernau, FSA, EA
Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath Vector Control -- #2624

September 2014

CONTENTS

Executive Summary **1**

Employer Contribution Rates 2

Accounting Information 4

Principal Valuation Results 6

 ▪ Employer 6

 ▪ SLGRP 7

 ▪ OPSRP 8

 ▪ Retiree Healthcare 9

Weighted Average Tier 1/Tier 2 Normal Cost **10**

Transition Liability Information **11**

Side Account Information **12**

Brief Summary of Actuarial Methods and Assumptions **14**

Brief Summary of Changes in Plan Provisions **16**

Glossary **17**

Executive Summary

Milliman has prepared this report for Klamath Vector Control to:

- Provide summary December 31, 2013 valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide employer-specific contribution rates effective effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2013, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath Vector Control.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates effective July 1, 2015 through June 30, 2017 for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Employer Rates Effective July 1, 2015 for Klamath Vector Control

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates		General Service	Police & Fire
	All T1/T2 Payroll	General Service	Police & Fire		
Pension					
Normal cost rate	15.39%	15.39%	16.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	4.50%	4.50%	4.50%	4.50%	4.50%
OPSRP UAL rate	0.61%	0.61%	0.61%	0.61%	0.61%
Pre-SLGRP pooled liability rate	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Transition liability/(surplus) rate ²	1.90%	1.90%	1.90%	1.90%	1.90%
Side account rate relief ²	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	20.59%	20.59%	21.71%	12.53%	16.64%
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.53%	0.53%	0.45%	0.45%
Total net employer contribution rate	21.12%	21.12%	22.24%	12.98%	17.09%

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.

¹ Includes Multnomah Fire District #10 rate.

² The transition liability/(surplus) rate and 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 pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP 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 or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2013 is 88%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost + Tier 1/Tier 2 UAL Rate	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

Accounting information for the purpose of completing the reporting and disclosure requirements of GASB 27 was provided in prior valuation reports. In June 2012 the GASB issued Statement No. 68, which replaces GASB 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS going forward and is not included in this report.

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in the December 31, 2012 valuation report.

Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under GASB 45. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 is calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
	Tier 1/Tier 2	OPSRP	
		General Service	Police & Fire
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%
RHIA July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%
RHIPA July 1, 2015 to June 30, 2017	0.00%	0.00%	0.00%

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath Vector Control

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Allocated pooled SLGRP T1/T2 UAL	\$106,682	\$141,516
Allocated pre-SLGRP pooled liability/(surplus)	(27,183)	(27,387)
Transition liability/(surplus)	28,677	29,905
Allocated pooled OPSRP UAL	9,949	9,742
Side account	0	0
Net unfunded pension actuarial accrued liability	118,125	153,776
Combined valuation payroll	140,703	138,217
Net pension UAL as a percentage of payroll	84%	111%
Pre-SLGRP pooled rate	(1.81%)	(1.76%)
Transition rate	1.90%	1.92%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,947	\$2,900
Allocated pooled RHIPA UAL	\$0	\$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. This allocation differs from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

SLGRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$398.2	\$424.1
Tier 1/Tier 2 valuation payroll	2,915.9	3,043.7
Normal cost rate	13.66%	13.93%
Actuarial accrued liability	\$31,738.8	\$30,601.9
Actuarial asset value	27,855.3	25,464.1
Unfunded actuarial accrued liability	3,883.5	5,137.8
Funded status	88%	83%
Combined valuation payroll	\$5,121.9	\$5,018.0
UAL as a percentage of payroll	76%	102%
UAL rate ¹	4.50%	4.24%
State and Community College Pre-SLGRP Pooled Liability	\$577.5	\$588.9
LGRP Pooled Liability	(242.7)	(246.7)
Total Transition Liability	(775.7)	(779.5)
Tier 1/Tier 2 Active Members		
▪ Count	42,668	46,437
▪ Average Age	51.9	51.6
▪ Average Service	17.8	17.2
▪ Average Valuation Payroll	\$68,339	\$65,545
Tier 1/Tier 2 Dormant Members		
▪ Count	20,897	22,891
▪ Average Age	54.1	54.2
▪ Average Monthly Benefit	\$1,298	\$1,353
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	75,014	70,892
▪ Average Age	70.2	70.1
▪ Average Monthly Benefit	\$1,992	\$1,944

¹ The December 31, 2013 UAL rate shown for the SLGRP includes 0.15% for Multnomah Fire District #10 (0.13% at December 31, 2012). The City of Portland pays an additional 1.14% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.15% (1.03% and 0.13% respectively at December 31, 2012).

Executive Summary

Principal Valuation Results (continued)

OPSRP

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
General service normal cost	\$234.7	\$213.5
OPSRP general service valuation payroll	3,200.0	2,899.3
General service normal cost rate	7.33%	7.36%
Police and fire normal cost	\$45.5	\$40.1
OPSRP police and fire valuation payroll	398.1	349.9
Police and fire normal cost rate	11.44%	11.46%
Actuarial accrued liability	\$2,243.3	\$1,795.6
Actuarial asset value	1,630.2	1,190.0
Unfunded actuarial accrued liability	613.2	605.5
Funded status	73%	66%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	7%	7%
UAL rate	0.61%	0.60%

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIA		
Normal cost	\$4.0	\$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	\$473.6	\$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	\$8,671.8	\$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

(\$ in millions)	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
RHIPA		
Normal cost	\$1.3	\$1.4
Tier 1 / Tier 2 valuation payroll	1,434.5	1,478.4
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$61.2	\$60.3
Actuarial asset value	5.2	4.4
Unfunded actuarial accrued liability	55.9	55.9
Funded status	9%	7%
Combined valuation payroll	\$2,531.5	\$2,432.4
UAL as a percentage of payroll	2%	2%
UAL rate	0.35%	0.34%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.39%	\$93,515	\$14,392	15.80%	\$92,098	\$14,551
Tier 2 General Service	10.57%	0	0	10.58%	0	0
Total General Service		93,515	14,392		92,098	14,551
Tier 1 Police & Fire	17.62%	0	0	17.89%	0	0
Tier 2 Police & Fire	15.63%	0	0	15.70%	0	0
Total Police & Fire		0	0		0	0
Total		\$93,515	\$14,392		\$92,098	\$14,551
Employer normal cost rate						
General Service			15.39%			15.80%
Police & Fire			16.51%			16.72%
Aggregate (Default)			15.39%			15.80%

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2012	\$29,905
2. January 1, 2013 through June 30, 2013	
A. Transition liability/(surplus) rate	2.92%
B. Actual employer payroll	66,015
C. Payment to transition liability/(surplus)	1,928
3. July 1, 2013 through December 31, 2013	
A. Transition liability/(surplus) rate	1.99%
B. Actual employer payroll	68,520
C. Payment to transition liability/(surplus)	1,363
4. Supplemental payment to transition liability	0
5. Interest	2,063
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2013	
(1. - 2C. - 3C. - 4. + 5. + 6.)	\$28,677

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2013	December 31, 2012
1. Total transition liability/(surplus)	28,677	29,905
2. Combined valuation payroll	140,703	138,217
3. Regular amortization factor	10.703	11.272
4. Total transition liability/(surplus) rate	1.90%	1.92%

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
1. Side account as of December 31, 2012	N/A		
2. Deposits during 2013		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2013			
5. Side account earnings during 2013			
6. Side account as of December 31, 2013 (1. + 2. + 3. + 4. + 5.)			

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	\$0	\$0

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2013	December 31, 2012
1. Total side account	\$0	\$0
2. Combined valuation payroll	140,703	138,217
3. Amortization factor	10.703	11.272
4. Total side account rate (-1. ÷ 2. ÷ 3.) ¹	0.00%	0.00%

¹ For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2013 valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization Method</i>	<p>The UAL is amortized as a level percentage of combined payroll.</p> <p>The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period.</p> <p>The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period.</p> <p>All existing Tier 1/Tier 2 UAL is re-amortized over a 20 year period as of the December 31, 2013 rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.</p>
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	<p>Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.</p>

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Net investment return</i>	7.75% compounded annually on system assets.
<i>Interest crediting</i>	<p>7.75% compounded annually on members' regular account balances starting in 2014.</p> <p>7.75% compounded annually on members' variable account balances starting in 2014.</p>
<i>Consumer price inflation</i>	2.75% per year.
<i>Future general wage inflation</i>	3.75% per year.
<i>Healthcare cost inflation</i>	Ranging from 6.1% in 2014 to 4.7% in 2083.
<i>OPSRP Administrative Expenses</i>	\$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.



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