



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

September 2014

Salem Housing Authority/2747
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



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Salem Housing Authority/2747

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
Salem Housing Authority/2747

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

INDEPENDENT EMPLOYERS

Salem Housing Authority -- #2747

September 2014

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Executive Summary

Milliman has prepared this report for Salem Housing Authority to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Salem Housing Authority.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Salem Housing Authority

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	12.20%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	3.30%	3.30%	3.30%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	16.11%	11.24%	15.35%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	16.64%	11.69%	15.80%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 93%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	15.50%	15.50%
Minimum July 1, 2017 Rate	12.40%	9.30%
Maximum July 1, 2017 Rate	18.60%	21.70%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$7,603,858	\$10,799,496	\$3,195,638	70%	\$2,239,378	143%
12/31/2009	8,872,284	12,178,813	3,306,529	73%	2,575,374	128%
12/31/2010	9,319,449	12,223,232	2,903,783	76%	2,702,281	107%
12/31/2011	9,559,472	12,177,434	2,617,962	79%	2,434,177	108%
12/31/2012	10,563,890	12,164,784	1,600,894	87%	2,346,011	68%
12/31/2013	11,707,116	12,604,785	897,669	93%	2,063,886	43%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Salem Housing Authority

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$897,669	\$1,600,894
Allocated pooled OPSRP UAL	145,929	165,353
Side account	0	0
Net unfunded pension actuarial accrued liability	1,043,598	1,766,247
Combined valuation payroll	2,063,886	2,346,011
Net pension UAL as a percentage of payroll	51%	75%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$28,566	\$49,220

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$164,205	\$199,978
Tier 1/Tier 2 valuation payroll	1,346,336	1,598,993
Tier 1/Tier 2 pension normal cost rate	12.20%	12.51%
Tier 1/ Tier 2 Actuarial accrued liability	\$12,604,785	\$12,164,784
Actuarial asset value	11,707,116	10,563,890
Tier 1/Tier 2 Unfunded actuarial accrued liability	897,669	1,600,894
Tier 1/ Tier 2 Funded status	93%	87%
Combined valuation payroll	\$2,063,886	\$2,346,011
Tier 1/Tier 2 UAL as a percentage of payroll	43%	68%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	3.30%	5.07%
Tier 1/Tier 2 active members ¹	23	28
Tier 1/Tier 2 dormant members	16	17
Tier 1/Tier 2 retirees and beneficiaries	43	40

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	2,063,886	2,346,011
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$1,504,314	\$1,556,909
2. Employer reserves	5,209,655	4,554,978
3. Benefits in force reserve	4,993,148	4,452,003
4. Total market value of assets (1. + 2. + 3.)	\$11,707,116	\$10,563,890

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$10,563,890
2. Regular employer contributions	276,424
3. Benefit payments and expense	(772,960)
4. Adjustments ²	110,229
5. Interest credited	1,529,533
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$11,707,116

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	75,793	107,542
Tier 2 Police & Fire	0	0
Tier 2 General Service	88,412	92,436
Total	\$164,205	\$199,978

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$164,205	\$164,205	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	2,100,785	2,545,497
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	1,465,480	1,312,985
▪ Total Active Members	\$3,566,265	\$3,858,482
Dormant Members	989,741	804,063
Retired Members and Beneficiaries	8,048,779	7,502,239
Total Actuarial Accrued Liability	\$12,604,785	\$12,164,784

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$12,604,785	\$12,604,785	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$12,604,785	\$12,164,784
2. Actuarial value of assets	11,707,116	10,563,890
3. Unfunded accrued liability (1. – 2.)	897,669	1,600,894
4. Funded percentage (2. ÷ 1.)	93%	87%
5. Combined valuation payroll	\$2,063,886	\$2,346,011
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	43%	68%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$897,669	\$64,973
Total				\$897,669	\$64,973

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$12,164,784
b. Normal cost at December 31, 2012	199,978
c. Benefit payments during 2013	(766,829)
d. Interest at 7.75% to December 31, 2013	928,554
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	12,526,487
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	12,526,487
2. Actuarial accrued liability at December 31, 2013	12,604,785
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(78,298)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	10,563,890
b. Contributions for 2013 ¹	276,424
c. Benefit payments and expenses during 2013	(772,960)
d. Interest at 7.75% to December 31, 2013	799,461
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	10,866,814
5. Actuarial value of assets at December 31, 2013	11,707,116
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	840,302
7. Total actuarial gain/(loss) (3. + 6.)	\$762,004

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$1,600,894
2. Expected increase	58,779
3. Liability (gain)/loss	78,298
4. Asset (gain)/loss	(840,302)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$897,669

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	75,793	508,934	14.89%	107,542	711,548	15.11%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	88,412	837,402	10.56%	92,436	887,445	10.42%
Total	\$164,205	\$1,346,336	12.20%	\$199,978	\$1,598,993	12.51%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$897,669	\$1,600,894
2. Next year's Tier 1/Tier 2 UAL payment	64,973	115,872
3. Combined valuation payroll	2,063,886	2,346,011
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	3.15%	4.94%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.20%	12.51%
b. Tier 1/Tier 2 UAL rate	3.15%	4.94%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	15.50%	17.58%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	14.65%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	14.65%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	2.93%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	93%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	11.65%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	17.65%
7. July 1, 2015 total pension rate, before adjustment	15.50%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.15%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	3.15%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	15.50%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	12.20%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	12.20%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	15.50%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.20%	12.51%
b. Tier 1/Tier 2 UAL rate	3.15%	4.94%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	15.50%	17.58%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$508,934	\$0	\$508,934
Tier 2	837,402	0	837,402
Tier 1/Tier 2 valuation payroll	1,346,336	0	1,346,336
OPSRP valuation payroll	717,550	0	717,550
Combined valuation payroll	\$2,063,886	\$0	\$2,063,886

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	8	15	15	38	12	16	15	43
Police & Fire	0	0	0	0	0	0	0	0
Total	8	15	15	38	12	16	15	43
Active Members with previous service segments with the employer								
General Service	5	6	N/A	11	1	0	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	5	6	N/A	11	1	0	N/A	1
Dormant Members								
General Service	5	11	4	20	4	13	2	19
Police & Fire	0	0	0	0	0	0	0	0
Total	5	11	4	20	4	13	2	19
Retired Members and Beneficiaries								
General Service	40	3	1	44	35	5	0	40
Police & Fire	0	0	0	0	0	0	0	0
Total	40	3	1	44	35	5	0	40
Grand Total Number of Members	58	35	20	113	52	34	17	103

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39			3	1						4
40-44			3	1						4
45-49			3							3
50-54			2							2
55-59				1	3	1				5
60-64			1		1	1				3
65-69			2							2
70-74										
75+										
Total	0	0	14	3	4	2	0	0	0	23

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54	1	1,200
30-34	2	4	55-59	2	695
35-39	1	820	60-64	13	1,448
40-44			65-69	16	1,422
45-49	1	638	70-74	5	1,179
50-54	3	1,439	75-79	5	1,423
55-59	3	361	80-84	1	3,197
60-64	4	952	85-89		
65-69	2	768	90-94		
70-74			95-99		
75+			100+		
Total	16	763	Total	43	1,404

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.



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

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

September 2014

Salmon Harbor-Douglas County/2675
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Salmon Harbor-Douglas County/2675

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
Salmon Harbor-Douglas County/2675

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

INDEPENDENT EMPLOYERS

Salmon Harbor-Douglas County -- #2675

September 2014

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Executive Summary

Milliman has prepared this report for Salmon Harbor-Douglas County to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Salmon Harbor-Douglas County.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Salmon Harbor-Douglas County

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	12.96%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(4.55%)	(4.55%)	(4.55%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	9.02%	3.39%	7.50%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	9.55%	3.84%	7.95%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 110%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	8.41%	8.41%
Minimum July 1, 2017 Rate	5.41%	2.41%
Maximum July 1, 2017 Rate	11.41%	14.41%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$1,080,491	\$1,219,367	\$138,876	89%	\$463,241	30%
12/31/2009	1,233,172	1,251,589	18,417	99%	488,950	4%
12/31/2010	1,383,010	1,389,813	6,803	100%	503,210	1%
12/31/2011	1,432,878	1,451,916	19,038	99%	508,435	4%
12/31/2012	1,345,487	1,136,722	(208,765)	118%	382,708	(55%)
12/31/2013	1,410,640	1,283,678	(126,962)	110%	358,232	(35%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Salmon Harbor-Douglas County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$126,962)	(\$208,765)
Allocated pooled OPSRP UAL	25,329	26,974
Side account	0	0
Net unfunded pension actuarial accrued liability	(101,633)	(181,791)
Combined valuation payroll	358,232	382,708
Net pension UAL as a percentage of payroll	(28%)	(48%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$4,958	\$8,029

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$28,292	\$37,976
Tier 1/Tier 2 valuation payroll	218,292	265,794
Tier 1/Tier 2 pension normal cost rate	12.96%	14.29%
Tier 1/ Tier 2 Actuarial accrued liability	\$1,283,678	\$1,136,722
Actuarial asset value	1,410,640	1,345,487
Tier 1/Tier 2 Unfunded actuarial accrued liability	(126,962)	(208,765)
Tier 1/ Tier 2 Funded status	110%	118%
Combined valuation payroll	\$358,232	\$382,708
Tier 1/Tier 2 UAL as a percentage of payroll	(35%)	(55%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(4.55%)	(5.88%)
Tier 1/Tier 2 active members ¹	5	7
Tier 1/Tier 2 dormant members	1	2
Tier 1/Tier 2 retirees and beneficiaries	8	5

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	358,232	382,708
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$92,365	\$232,709
2. Employer reserves	793,658	867,484
3. Benefits in force reserve	524,617	245,294
4. Total market value of assets (1. + 2. + 3.)	\$1,410,640	\$1,345,487

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$1,345,487
2. Regular employer contributions	17,550
3. Benefit payments and expense	(81,213)
4. Adjustments ²	(78,494)
5. Interest credited	207,309
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$1,410,640

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	6,895	12,991
Tier 2 Police & Fire	0	0
Tier 2 General Service	21,397	24,985
Total	\$28,292	\$37,976

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$28,292	\$28,292	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	156,711	288,842
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	279,796	289,659
▪ Total Active Members	\$436,507	\$578,501
Dormant Members	1,507	144,867
Retired Members and Beneficiaries	845,664	413,354
Total Actuarial Accrued Liability	\$1,283,678	\$1,136,722

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$1,283,678	\$1,283,678	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$1,283,678	\$1,136,722
2. Actuarial value of assets	1,410,640	1,345,487
3. Unfunded accrued liability (1. – 2.)	(126,962)	(208,765)
4. Funded percentage (2. ÷ 1.)	110%	118%
5. Combined valuation payroll	\$358,232	\$382,708
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(35%)	(55%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$126,962)	(\$9,189)
Total				(\$126,962)	(\$9,189)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$1,136,722
b. Normal cost at December 31, 2012	37,976
c. Benefit payments during 2013	(80,569)
d. Interest at 7.75% to December 31, 2013	87,917
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	1,182,046
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	1,182,046
2. Actuarial accrued liability at December 31, 2013	1,283,678
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(101,632)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,345,487
b. Contributions for 2013 ¹	17,550
c. Benefit payments and expenses during 2013	(81,213)
d. Interest at 7.75% to December 31, 2013	101,808
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	1,383,633
5. Actuarial value of assets at December 31, 2013	1,410,640
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	27,007
7. Total actuarial gain/(loss) (3. + 6.)	(\$74,625)

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$208,765)
2. Expected increase	7,178
3. Liability (gain)/loss	101,632
4. Asset (gain)/loss	(27,007)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$126,962)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	6,895	60,851	11.33%	12,991	85,549	15.19%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	21,397	157,441	13.59%	24,985	180,245	13.86%
Total	\$28,292	\$218,292	12.96%	\$37,976	\$265,794	14.29%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$126,962)	(\$208,765)
2. Next year's Tier 1/Tier 2 UAL payment	(9,189)	(15,110)
3. Combined valuation payroll	358,232	382,708
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(2.57%)	(3.95%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.96%	14.29%
b. Tier 1/Tier 2 UAL rate	(2.57%)	(3.95%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	10.54%	10.47%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	5.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	5.41%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.08%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	110%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	2.41%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	8.41%
7. July 1, 2015 total pension rate, before adjustment	10.54%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(2.13%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(2.57%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(4.70%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.41%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	12.96%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	12.96%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	8.41%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.96%	14.29%
b. Tier 1/Tier 2 UAL rate	(4.70%)	(6.01%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	8.41%	8.41%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$60,851	\$0	\$60,851
Tier 2	157,441	0	157,441
Tier 1/Tier 2 valuation payroll	218,292	0	218,292
OPSRP valuation payroll	139,940	0	139,940
Combined valuation payroll	\$358,232	\$0	\$358,232

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	1	4	6	11	2	5	5	12
Police & Fire	0	0	0	0	0	0	0	0
Total	1	4	6	11	2	5	5	12
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	1	3	4	1	1	1	3
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	3	4	1	1	1	3
Retired Members and Beneficiaries								
General Service	7	1	0	8	5	0	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	7	1	0	8	5	0	0	5
Grand Total Number of Members	8	6	9	23	8	6	6	20

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34			1							1
35-39			1							1
40-44										
45-49				1						1
50-54										
55-59										
60-64			1							1
65-69			1							1
70-74										
75+										
Total	0	0	4	1	0	0	0	0	0	5

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59	1	1,395
35-39			60-64	1	1,749
40-44			65-69	4	418
45-49			70-74	1	248
50-54			75-79		
55-59			80-84	1	1,630
60-64			85-89		
65-69	1	126	90-94		
70-74			95-99		
75+			100+		
Total	1	126	Total	8	837

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.



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

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

September 2014

Sisters-Camp Sherman Rural Fire Protection District/2701
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Sisters-Camp Sherman Rural Fire Protection District/2701

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
Sisters-Camp Sherman Rural Fire Protection District/2701

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

INDEPENDENT EMPLOYERS

Sisters-Camp Sherman Rural Fire Protection District -- #2701

September 2014

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Executive Summary

Milliman has prepared this report for Sisters-Camp Sherman Rural Fire Protection District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Sisters-Camp Sherman Rural Fire Protection District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Sisters-Camp Sherman Rural Fire Protection District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	15.74%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	3.93%	3.93%	3.93%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	20.28%	11.87%	15.98%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	20.81%	12.32%	16.43%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 82%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	19.67%	19.67%
Minimum July 1, 2017 Rate	15.74%	11.81%
Maximum July 1, 2017 Rate	23.60%	27.53%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$1,573,874	\$1,825,782	\$251,908	86%	\$1,024,272	25%
12/31/2009	1,935,927	2,233,819	297,892	87%	1,135,656	26%
12/31/2010	2,273,163	2,884,837	611,674	79%	1,269,035	48%
12/31/2011	2,164,565	2,972,903	808,338	73%	879,705	92%
12/31/2012	2,517,320	3,313,831	796,511	76%	1,179,483	68%
12/31/2013	2,983,177	3,635,619	652,442	82%	989,618	66%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Sisters-Camp Sherman Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$652,442	\$796,511
Allocated pooled OPSRP UAL	69,972	83,133
Side account	0	0
Net unfunded pension actuarial accrued liability	722,414	879,644
Combined valuation payroll	989,618	1,179,483
Net pension UAL as a percentage of payroll	73%	75%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$13,697	\$24,746

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$96,915	\$129,793
Tier 1/Tier 2 valuation payroll	615,687	845,727
Tier 1/Tier 2 pension normal cost rate	15.74%	15.35%
Tier 1/ Tier 2 Actuarial accrued liability	\$3,635,619	\$3,313,831
Actuarial asset value	2,983,177	2,517,320
Tier 1/Tier 2 Unfunded actuarial accrued liability	652,442	796,511
Tier 1/ Tier 2 Funded status	82%	76%
Combined valuation payroll	\$989,618	\$1,179,483
Tier 1/Tier 2 UAL as a percentage of payroll	66%	68%
Tier 1/Tier 2 UAL rate	3.93%	4.32%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members ¹	6	8
Tier 1/Tier 2 dormant members	3	1
Tier 1/Tier 2 retirees and beneficiaries	5	5

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	989,618	1,179,483
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$327,005	\$281,510
2. Employer reserves	1,939,444	1,553,054
3. Benefits in force reserve	716,728	682,757
4. Total market value of assets (1. + 2. + 3.)	\$2,983,177	\$2,517,320

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$2,517,320
2. Regular employer contributions	125,677
3. Benefit payments and expense	(110,952)
4. Adjustments ²	52,690
5. Interest credited	398,442
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$2,983,177

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$57,584	\$82,840
Tier 1 General Service	0	8,890
Tier 2 Police & Fire	34,398	33,370
Tier 2 General Service	4,933	4,693
Total	\$96,915	\$129,793

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$96,915	\$96,915	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$706,865	\$1,198,358
▪ Tier 1 General Service	0	219,856
▪ Tier 2 Police & Fire	569,250	511,343
▪ Tier 2 General Service	74,931	62,421
▪ Total Active Members	\$1,351,046	\$1,991,978
Dormant Members	1,129,233	171,314
Retired Members and Beneficiaries	1,155,340	1,150,539
Total Actuarial Accrued Liability	\$3,635,619	\$3,313,831

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$3,635,619	\$3,635,619	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$3,635,619	\$3,313,831
2. Actuarial value of assets	2,983,177	2,517,320
3. Unfunded accrued liability (1. – 2.)	652,442	796,511
4. Funded percentage (2. ÷ 1.)	82%	76%
5. Combined valuation payroll	\$989,618	\$1,179,483
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	66%	68%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$652,442	\$47,224
Total				\$652,442	\$47,224

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$3,313,831
b. Normal cost at December 31, 2012	129,793
c. Benefit payments during 2013	(110,072)
d. Interest at 7.75% to December 31, 2013	262,616
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	3,596,168
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	3,596,168
2. Actuarial accrued liability at December 31, 2013	3,635,619
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(39,451)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,517,320
b. Contributions for 2013 ¹	125,677
c. Benefit payments and expenses during 2013	(110,952)
d. Interest at 7.75% to December 31, 2013	195,663
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	2,727,708
5. Actuarial value of assets at December 31, 2013	2,983,177
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	255,469
7. Total actuarial gain/(loss) (3. + 6.)	\$216,018

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$796,511
2. Expected increase	71,949
3. Liability (gain)/loss	39,451
4. Asset (gain)/loss	(255,469)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$652,442

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$57,584	\$342,412	16.82%	\$82,840	\$514,066	16.11%
Tier 1 General Service	0	0	0.00%	8,890	67,641	13.14%
Tier 2 Police & Fire	34,398	213,677	16.10%	33,370	207,243	16.10%
Tier 2 General Service	4,933	59,598	8.28%	4,693	56,777	8.27%
Total	\$96,915	\$615,687	15.74%	\$129,793	\$845,727	15.35%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$652,442	\$796,511
2. Next year's Tier 1/Tier 2 UAL payment	47,224	57,651
3. Combined valuation payroll	989,618	1,179,483
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	4.77%	4.89%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.74%	15.35%
b. Tier 1/Tier 2 UAL rate	4.77%	4.89%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	20.66%	20.37%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	16.39%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	16.39%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	3.28%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.28%
c. Funded percentage	82%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.28%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	13.11%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	19.67%
7. July 1, 2015 total pension rate, before adjustment	20.66%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(0.99%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	4.77%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	3.78%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	19.67%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	15.74%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	15.74%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	19.67%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.74%	15.35%
b. Tier 1/Tier 2 UAL rate	3.78%	4.19%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	19.67%	19.67%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$342,412	\$342,412
Tier 2	59,598	213,677	273,275
Tier 1/Tier 2 valuation payroll	59,598	556,089	615,687
OPSRP valuation payroll	0	373,931	373,931
Combined valuation payroll	\$59,598	\$930,020	\$989,618

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	1	0	1	1	1	0	2
Police & Fire	3	2	5	10	4	2	5	11
Total	3	3	5	11	5	3	5	13
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	1	N/A	1	0	0	N/A	0
Total	0	1	N/A	1	0	0	N/A	0
Dormant Members								
General Service	1	0	0	1	0	0	0	0
Police & Fire	2	0	1	3	1	0	1	2
Total	3	0	1	4	1	0	1	2
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	4	1	0	5	4	1	0	5
Total	4	1	0	5	4	1	0	5
Grand Total Number of Members	10	5	6	21	10	4	6	20

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39			2	1						3
40-44										
45-49			1			1				2
50-54										
55-59				1						1
60-64										
65-69										
70-74										
75+										
Total	0	0	3	2	0	1	0	0	0	6

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59	1	3,783
35-39			60-64	2	1,157
40-44			65-69	1	1,157
45-49	1	2,480	70-74		
50-54			75-79	1	334
55-59	1	4,187	80-84		
60-64	1	2,102	85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	3	2,923	Total	5	1,517

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.



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

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

September 2014

South Lane County Fire and Rescue/2859
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
South Lane County Fire and Rescue/2859

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
South Lane County Fire and Rescue/2859

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

INDEPENDENT EMPLOYERS

South Lane County Fire and Rescue -- #2859

September 2014

Secondary Employers

2827 Creswell Rural Fire Protection District

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Executive Summary

Milliman has prepared this report for South Lane County Fire and Rescue to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to South Lane County Fire and Rescue.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for South Lane County Fire and Rescue

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	17.03%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	6.01%	6.01%	6.01%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	23.65%	13.95%	18.06%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	24.18%	14.40%	18.51%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 39%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	23.04%	23.04%
Minimum July 1, 2017 Rate	18.43%	13.82%
Maximum July 1, 2017 Rate	27.65%	32.26%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$632,523	\$1,172,823	\$540,300	54%	\$1,219,019	44%
12/31/2009	817,056	1,603,224	786,168	51%	1,367,464	57%
12/31/2010	943,572	1,891,427	947,855	50%	1,483,211	64%
12/31/2011	1,034,896	2,162,175	1,127,279	48%	1,340,704	84%
12/31/2012	1,027,376	2,784,912	1,757,536	37%	1,671,543	105%
12/31/2013	1,203,455	3,095,152	1,891,697	39%	1,700,151	111%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

South Lane County Fire and Rescue

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$1,891,697	\$1,757,536
Allocated pooled OPSRP UAL	120,211	117,815
Side account	0	0
Net unfunded pension actuarial accrued liability	2,011,908	1,875,351
Combined valuation payroll	1,700,151	1,671,543
Net pension UAL as a percentage of payroll	118%	112%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$23,532	\$35,070

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$102,234	\$128,881
Tier 1/Tier 2 valuation payroll	600,321	761,205
Tier 1/Tier 2 pension normal cost rate	17.03%	16.93%
Tier 1/ Tier 2 Actuarial accrued liability	\$3,095,152	\$2,784,912
Actuarial asset value	1,203,455	1,027,376
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,891,697	1,757,536
Tier 1/ Tier 2 Funded status	39%	37%
Combined valuation payroll	\$1,700,151	\$1,671,543
Tier 1/Tier 2 UAL as a percentage of payroll	111%	105%
Tier 1/Tier 2 UAL rate	6.01%	6.11%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members ¹	6	8
Tier 1/Tier 2 dormant members	4	3
Tier 1/Tier 2 retirees and beneficiaries	7	6

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	1,700,151	1,671,543
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$53,700	\$47,381
2. Employer reserves	477,643	411,592
3. Benefits in force reserve	672,112	568,403
4. Total market value of assets (1. + 2. + 3.)	\$1,203,455	\$1,027,376

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$1,027,376
2. Regular employer contributions	104,965
3. Benefit payments and expense	(104,046)
4. Adjustments ²	7,565
5. Interest credited	167,596
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$1,203,455

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$73,933	\$92,172
Tier 1 General Service	0	7,823
Tier 2 Police & Fire	28,301	28,886
Tier 2 General Service	0	0
Total	\$102,234	\$128,881

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$102,234	\$102,234	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$1,039,656	\$1,175,396
▪ Tier 1 General Service	0	66,500
▪ Tier 2 Police & Fire	595,825	560,162
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$1,635,481	\$1,802,058
Dormant Members	376,249	25,017
Retired Members and Beneficiaries	1,083,422	957,837
Total Actuarial Accrued Liability	\$3,095,152	\$2,784,912

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$3,095,152	\$3,095,152	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$3,095,152	\$2,784,912
2. Actuarial value of assets	1,203,455	1,027,376
3. Unfunded accrued liability (1. – 2.)	1,891,697	1,757,536
4. Funded percentage (2. ÷ 1.)	39%	37%
5. Combined valuation payroll	\$1,700,151	\$1,671,543
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	111%	105%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$1,891,697	\$136,921
Total				\$1,891,697	\$136,921

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$2,784,912
b. Normal cost at December 31, 2012	128,881
c. Benefit payments during 2013	(103,221)
d. Interest at 7.75% to December 31, 2013	221,819
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	3,032,391
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	3,032,391
2. Actuarial accrued liability at December 31, 2013	3,095,152
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(62,761)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,027,376
b. Contributions for 2013 ¹	104,965
c. Benefit payments and expenses during 2013	(104,046)
d. Interest at 7.75% to December 31, 2013	79,657
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	1,107,952
5. Actuarial value of assets at December 31, 2013	1,203,455
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	95,503
7. Total actuarial gain/(loss) (3. + 6.)	\$32,742

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$1,757,536
2. Expected increase	166,903
3. Liability (gain)/loss	62,761
4. Asset (gain)/loss	(95,503)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$1,891,697

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$73,933	\$401,559	18.41%	\$92,172	\$501,094	18.39%
Tier 1 General Service	0	0	0.00%	7,823	54,622	14.32%
Tier 2 Police & Fire	28,301	198,762	14.24%	28,886	205,489	14.06%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$102,234	\$600,321	17.03%	\$128,881	\$761,205	16.93%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$1,891,697	\$1,757,536
2. Next year's Tier 1/Tier 2 UAL payment	136,921	127,210
3. Combined valuation payroll	1,700,151	1,671,543
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	8.05%	7.61%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	17.03%	16.93%
b. Tier 1/Tier 2 UAL rate	8.05%	7.61%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	25.23%	24.67%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	16.46%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	16.46%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	3.29%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.29%
c. Funded percentage	39%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	6.58%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	9.88%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	23.04%
7. July 1, 2015 total pension rate, before adjustment	25.23%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(2.19%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	8.05%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	5.86%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	23.04%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	17.03%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	17.03%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	23.04%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	17.03%	16.93%
b. Tier 1/Tier 2 UAL rate	5.86%	5.98%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	23.04%	23.04%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$401,559	\$401,559
Tier 2	0	198,762	198,762
Tier 1/Tier 2 valuation payroll	0	600,321	600,321
OPSRP valuation payroll	93,966	1,005,864	1,099,830
Combined valuation payroll	\$93,966	\$1,606,185	\$1,700,151

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	2	2	1	0	1	2
Police & Fire	4	2	12	18	5	2	10	17
Total	4	2	14	20	6	2	11	19
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	1	4	N/A	5	1	2	N/A	3
Total	1	4	N/A	5	1	2	N/A	3
Dormant Members								
General Service	0	1	0	1	0	1	0	1
Police & Fire	2	1	0	3	1	1	0	2
Total	2	2	0	4	1	2	0	3
Retired Members and Beneficiaries								
General Service	1	0	0	1	0	0	0	0
Police & Fire	5	1	0	6	5	1	0	6
Total	6	1	0	7	5	1	0	6
Grand Total Number of Members	13	9	14	36	13	7	11	31

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39			1							1
40-44				1						1
45-49			1							1
50-54					1	1				2
55-59						1				1
60-64										
65-69										
70-74										
75+										
Total	0	0	2	1	1	2	0	0	0	6

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54	1	2,363
30-34			55-59	3	477
35-39			60-64	3	1,105
40-44	1	227	65-69		
45-49			70-74		
50-54			75-79		
55-59	3	825	80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	4	675	Total	7	1,016

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.



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

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

September 2014

Southwestern Polk County Rural Fire Protection District/2803
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Southwestern Polk County Rural Fire Protection District/2803

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
Southwestern Polk County Rural Fire Protection District/2803

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

INDEPENDENT EMPLOYERS

Southwestern Polk County Rural Fire Protection District -- #280

September 2014

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Executive Summary

Milliman has prepared this report for Southwestern Polk County Rural Fire Protection District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Southwestern Polk County Rural Fire Protection District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Southwestern Polk County Rural Fire Protection District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	14.24%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(3.63%)	(3.63%)	(3.63%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	11.22%	4.31%	8.42%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	11.75%	4.76%	8.87%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 136%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	10.61%	10.61%
Minimum July 1, 2017 Rate	7.61%	4.61%
Maximum July 1, 2017 Rate	13.61%	16.61%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$65,605	\$60,353	(\$5,252)	109%	\$33,525	(16%)
12/31/2009	74,517	59,350	(15,167)	126%	34,630	(44%)
12/31/2010	80,618	58,861	(21,757)	137%	36,315	(60%)
12/31/2011	67,029	59,440	(7,589)	113%	36,767	(21%)
12/31/2012	71,598	57,004	(14,594)	126%	37,423	(39%)
12/31/2013	76,824	56,412	(20,412)	136%	39,029	(52%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Southwestern Polk County Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$20,412)	(\$14,594)
Allocated pooled OPSRP UAL	2,760	2,638
Side account	0	0
Net unfunded pension actuarial accrued liability	(17,652)	(11,956)
Combined valuation payroll	39,029	37,423
Net pension UAL as a percentage of payroll	(45%)	(32%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$540	\$785

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$0	\$0
Tier 1/Tier 2 valuation payroll	0	0
Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
Tier 1/ Tier 2 Actuarial accrued liability	\$56,412	\$57,004
Actuarial asset value	76,824	71,598
Tier 1/Tier 2 Unfunded actuarial accrued liability	(20,412)	(14,594)
Tier 1/ Tier 2 Funded status	136%	126%
Combined valuation payroll	\$39,029	\$37,423
Tier 1/Tier 2 UAL as a percentage of payroll	(52%)	(39%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(3.63%)	(2.69%)
Tier 1/Tier 2 active members ¹	0	0
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	2	2

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	39,029	37,423
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$0	\$0
2. Employer reserves	41,827	37,771
3. Benefits in force reserve	34,996	33,827
4. Total market value of assets (1. + 2. + 3.)	\$76,824	\$71,598

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$71,598
2. Regular employer contributions	(1,548)
3. Benefit payments and expense	(5,418)
4. Adjustments ²	1,824
5. Interest credited	10,367
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$76,824

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	\$0	\$0

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$0	\$0	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$0	\$0
Dormant Members	0	0
Retired Members and Beneficiaries	56,412	57,004
Total Actuarial Accrued Liability	\$56,412	\$57,004

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$56,412	\$56,412	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$56,412	\$57,004
2. Actuarial value of assets	76,824	71,598
3. Unfunded accrued liability (1. – 2.)	(20,412)	(14,594)
4. Funded percentage (2. ÷ 1.)	136%	126%
5. Combined valuation payroll	\$39,029	\$37,423
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(52%)	(39%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$20,412)	(\$1,477)
Total				(\$20,412)	(\$1,477)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$57,004
b. Normal cost at December 31, 2012	0
c. Benefit payments during 2013	(5,375)
d. Interest at 7.75% to December 31, 2013	4,210
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	55,839
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	55,839
2. Actuarial accrued liability at December 31, 2013	56,412
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(573)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	71,598
b. Contributions for 2013 ¹	(1,548)
c. Benefit payments and expenses during 2013	(5,418)
d. Interest at 7.75% to December 31, 2013	5,279
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	69,912
5. Actuarial value of assets at December 31, 2013	76,824
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	6,912
7. Total actuarial gain/(loss) (3. + 6.)	\$6,339

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$14,594)
2. Expected increase	521
3. Liability (gain)/loss	573
4. Asset (gain)/loss	(6,912)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$20,412)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$0	\$0	14.24%	\$0	\$0	14.33%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$20,412)	(\$14,594)
2. Next year's Tier 1/Tier 2 UAL payment	(1,477)	(1,056)
3. Combined valuation payroll	39,029	37,423
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(3.78%)	(2.82%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
b. Tier 1/Tier 2 UAL rate	(3.78%)	(2.82%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	10.61%	11.64%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	6.12%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	6.12%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.22%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	136%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	4.80%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	1.32%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	10.92%
7. July 1, 2015 total pension rate, before adjustment	10.61%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.78%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(3.78%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	10.61%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	14.24%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	14.24%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	10.61%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
b. Tier 1/Tier 2 UAL rate	(3.78%)	(2.82%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	10.61%	11.64%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	0	0
OPSRP valuation payroll	39,029	0	39,029
Combined valuation payroll	\$39,029	\$0	\$39,029

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	1	1	0	0	1	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	1	1
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	0	1	0	1	0	1	0	1
Police & Fire	0	1	0	1	0	1	0	1
Total	0	2	0	2	0	2	0	2
Grand Total Number of Members	0	2	1	3	0	2	1	3

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	0	0	0	0	0	0	0	0

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69	2	213
45-49			70-74		
50-54			75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total	2	213

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.



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

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

September 2014

Springfield Utility Board/2767
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Springfield Utility Board/2767

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
Springfield Utility Board/2767

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

INDEPENDENT EMPLOYERS

Springfield Utility Board -- #2767

September 2014

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Executive Summary

Milliman has prepared this report for Springfield Utility Board to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Springfield Utility Board.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Springfield Utility Board

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	13.51%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(5.10%)	(5.10%)	(5.10%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	9.02%	2.84%	6.95%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	9.55%	3.29%	7.40%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 116%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	8.41%	8.41%
Minimum July 1, 2017 Rate	5.41%	2.41%
Maximum July 1, 2017 Rate	11.41%	14.41%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$167,787	\$198,236	\$30,449	85%	\$68,162	45%
12/31/2009	204,111	219,285	15,174	93%	78,307	19%
12/31/2010	234,185	240,917	6,732	97%	77,075	9%
12/31/2011	248,311	257,708	9,397	96%	79,824	12%
12/31/2012	292,221	250,720	(41,501)	117%	83,649	(50%)
12/31/2013	336,955	291,087	(45,868)	116%	86,946	(53%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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	General Service	Police & Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Springfield Utility Board

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$45,868)	(\$41,501)
Allocated pooled OPSRP UAL	6,148	5,896
Side account	0	0
Net unfunded pension actuarial accrued liability	(39,720)	(35,605)
Combined valuation payroll	86,946	83,649
Net pension UAL as a percentage of payroll	(46%)	(43%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,203	\$1,755

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$11,744	\$11,263
Tier 1/Tier 2 valuation payroll	86,946	83,649
Tier 1/Tier 2 pension normal cost rate	13.51%	13.46%
Tier 1/ Tier 2 Actuarial accrued liability	\$291,087	\$250,720
Actuarial asset value	336,955	292,221
Tier 1/Tier 2 Unfunded actuarial accrued liability	(45,868)	(41,501)
Tier 1/ Tier 2 Funded status	116%	117%
Combined valuation payroll	\$86,946	\$83,649
Tier 1/Tier 2 UAL as a percentage of payroll	(53%)	(50%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(5.10%)	(5.05%)
Tier 1/Tier 2 active members ¹	1	1
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	0	0

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	86,946	83,649
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$112,197	\$103,296
2. Employer reserves	224,758	188,925
3. Benefits in force reserve	0	0
4. Total market value of assets (1. + 2. + 3.)	\$336,955	\$292,221

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$292,221
2. Regular employer contributions	5,590
3. Benefit payments and expense	0
4. Adjustments ²	632
5. Interest credited	38,512
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$336,955

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	11,744	11,263
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	\$11,744	\$11,263

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$11,744	\$11,744	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	291,087	250,720
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$291,087	\$250,720
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	\$291,087	\$250,720

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$291,087	\$291,087	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$291,087	\$250,720
2. Actuarial value of assets	336,955	292,221
3. Unfunded accrued liability (1. – 2.)	(45,868)	(41,501)
4. Funded percentage (2. ÷ 1.)	116%	117%
5. Combined valuation payroll	\$86,946	\$83,649
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(53%)	(50%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$45,868)	(\$3,320)
Total				(\$45,868)	(\$3,320)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$250,720
b. Normal cost at December 31, 2012	11,263
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	20,304
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	282,287
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	282,287
2. Actuarial accrued liability at December 31, 2013	291,087
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(8,800)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	292,221
b. Contributions for 2013 ¹	5,590
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	22,864
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	320,675
5. Actuarial value of assets at December 31, 2013	336,955
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	16,280
7. Total actuarial gain/(loss) (3. + 6.)	\$7,480

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$41,501)
2. Expected increase	3,113
3. Liability (gain)/loss	8,800
4. Asset (gain)/loss	(16,280)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$45,868)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	11,744	86,946	13.51%	11,263	83,649	13.46%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$11,744	\$86,946	13.51%	\$11,263	\$83,649	13.46%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$45,868)	(\$41,501)
2. Next year's Tier 1/Tier 2 UAL payment	(3,320)	(3,004)
3. Combined valuation payroll	86,946	83,649
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(3.82%)	(3.59%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.51%	13.46%
b. Tier 1/Tier 2 UAL rate	(3.82%)	(3.59%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	9.84%	10.00%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	5.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	5.41%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.08%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	116%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	2.41%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	8.41%
7. July 1, 2015 total pension rate, before adjustment	9.84%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(1.43%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.82%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(5.25%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.41%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	13.51%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	13.51%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	8.41%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.51%	13.46%
b. Tier 1/Tier 2 UAL rate	(5.25%)	(5.18%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	8.41%	8.41%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$86,946	\$0	\$86,946
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	86,946	0	86,946
OPSRP valuation payroll	0	0	0
Combined valuation payroll	\$86,946	\$0	\$86,946

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	1	0	0	1	1	0	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	0	1	1	0	0	1
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Grand Total Number of Members	1	0	0	1	1	0	0	1

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59					1					1
60-64										
65-69										
70-74										
75+										
Total	0	0	0	0	1	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total		

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.



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

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

September 2014

Sunrise Water Authority/2845
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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

September 2014
Sunrise Water Authority/2845

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
Sunrise Water Authority/2845

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

INDEPENDENT EMPLOYERS

Sunrise Water Authority -- #2845

September 2014

Secondary Employers

2586	Mt Scott Water District
2656	Damascus Water District

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Executive Summary

Milliman has prepared this report for Sunrise Water Authority to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Sunrise Water Authority.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Sunrise Water Authority

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	9.07%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	5.59%	5.59%	5.59%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	15.27%	13.53%	17.64%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	15.80%	13.98%	18.09%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 80%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	14.66%	14.66%
Minimum July 1, 2017 Rate	11.66%	8.66%
Maximum July 1, 2017 Rate	17.66%	20.66%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$3,054,311	\$3,881,452	\$827,141	79%	\$1,158,722	71%
12/31/2009	2,864,075	3,700,299	836,224	77%	948,066	88%
12/31/2010	3,071,750	3,823,574	751,824	80%	931,592	81%
12/31/2011	2,709,139	3,974,445	1,265,306	68%	1,060,987	119%
12/31/2012	2,973,563	4,013,502	1,039,939	74%	1,130,346	92%
12/31/2013	3,222,903	4,026,330	803,427	80%	1,068,798	75%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Sunrise Water Authority

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$803,427	\$1,039,939
Allocated pooled OPSRP UAL	75,571	79,670
Side account	0	0
Net unfunded pension actuarial accrued liability	878,998	1,119,609
Combined valuation payroll	1,068,798	1,130,346
Net pension UAL as a percentage of payroll	82%	99%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$14,793	\$23,715

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$21,045	\$41,037
Tier 1/Tier 2 valuation payroll	232,133	393,602
Tier 1/Tier 2 pension normal cost rate	9.07%	10.43%
Tier 1/ Tier 2 Actuarial accrued liability	\$4,026,330	\$4,013,502
Actuarial asset value	3,222,903	2,973,563
Tier 1/Tier 2 Unfunded actuarial accrued liability	803,427	1,039,939
Tier 1/ Tier 2 Funded status	80%	74%
Combined valuation payroll	\$1,068,798	\$1,130,346
Tier 1/Tier 2 UAL as a percentage of payroll	75%	92%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	5.59%	4.48%
Tier 1/Tier 2 active members ¹	3	5
Tier 1/Tier 2 dormant members	8	8
Tier 1/Tier 2 retirees and beneficiaries	16	15

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	1,068,798	1,130,346
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$340,973	\$330,516
2. Employer reserves	991,681	929,100
3. Benefits in force reserve	1,890,249	1,713,946
4. Total market value of assets (1. + 2. + 3.)	\$3,222,903	\$2,973,563

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$2,973,563
2. Regular employer contributions	78,596
3. Benefit payments and expense	(292,619)
4. Adjustments ²	21,068
5. Interest credited	442,295
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$3,222,903

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	6,176
Tier 2 Police & Fire	0	0
Tier 2 General Service	21,045	34,861
Total	\$21,045	\$41,037

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$21,045	\$21,045	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	122,549	199,044
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	487,009	590,312
▪ Total Active Members	\$609,558	\$789,356
Dormant Members	369,756	335,909
Retired Members and Beneficiaries	3,047,016	2,888,237
Total Actuarial Accrued Liability	\$4,026,330	\$4,013,502

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$4,026,330	\$4,026,330	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$4,026,330	\$4,013,502
2. Actuarial value of assets	3,222,903	2,973,563
3. Unfunded accrued liability (1. – 2.)	803,427	1,039,939
4. Funded percentage (2. ÷ 1.)	80%	74%
5. Combined valuation payroll	\$1,068,798	\$1,130,346
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	75%	92%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$803,427	\$58,152
Total				\$803,427	\$58,152

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$4,013,502
b. Normal cost at December 31, 2012	41,037
c. Benefit payments during 2013	(290,298)
d. Interest at 7.75% to December 31, 2013	302,978
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	4,067,219
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	4,067,219
2. Actuarial accrued liability at December 31, 2013	4,026,330
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	40,889
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,973,563
b. Contributions for 2013 ¹	78,596
c. Benefit payments and expenses during 2013	(292,619)
d. Interest at 7.75% to December 31, 2013	222,158
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	2,981,698
5. Actuarial value of assets at December 31, 2013	3,222,903
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	241,205
7. Total actuarial gain/(loss) (3. + 6.)	\$282,094

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$1,039,939
2. Expected increase	45,582
3. Liability (gain)/loss	(40,889)
4. Asset (gain)/loss	(241,205)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$803,427

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	6,176	64,056	9.64%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	21,045	232,133	9.07%	34,861	329,546	10.58%
Total	\$21,045	\$232,133	9.07%	\$41,037	\$393,602	10.43%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$803,427	\$1,039,939
2. Next year's Tier 1/Tier 2 UAL payment	58,152	75,271
3. Combined valuation payroll	1,068,798	1,130,346
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	5.44%	6.66%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	9.07%	10.43%
b. Tier 1/Tier 2 UAL rate	5.44%	6.66%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	14.66%	17.22%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	11.91%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	11.91%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	2.38%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	80%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	8.91%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	14.91%
7. July 1, 2015 total pension rate, before adjustment	14.66%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	5.44%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	5.44%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	14.66%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	9.07%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	9.07%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	14.66%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	9.07%	10.43%
b. Tier 1/Tier 2 UAL rate	5.44%	4.35%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	14.66%	14.91%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	232,133	0	232,133
Tier 1/Tier 2 valuation payroll	232,133	0	232,133
OPSRP valuation payroll	836,665	0	836,665
Combined valuation payroll	\$1,068,798	\$0	\$1,068,798

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	3	13	16	1	4	12	17
Police & Fire	0	0	0	0	0	0	0	0
Total	0	3	13	16	1	4	12	17
Active Members with previous service segments with the employer								
General Service	2	1	N/A	3	1	0	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	2	1	N/A	3	1	0	N/A	1
Dormant Members								
General Service	5	3	1	9	5	3	0	8
Police & Fire	0	0	0	0	0	0	0	0
Total	5	3	1	9	5	3	0	8
Retired Members and Beneficiaries								
General Service	15	1	0	16	15	0	0	15
Police & Fire	0	0	0	0	0	0	0	0
Total	15	1	0	16	15	0	0	15
Grand Total Number of Members	22	8	14	44	22	7	12	41

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39			1							1
40-44			1	1						2
45-49										
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	2	1	0	0	0	0	0	3

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64	3	2,245
40-44			65-69	3	1,258
45-49	4	1,319	70-74	3	2,204
50-54	1	0	75-79	3	1,109
55-59	1	0	80-84	2	1,174
60-64	2	376	85-89	1	533
65-69			90-94	1	607
70-74			95-99		
75+			100+		
Total	8	753	Total	16	1,496

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.



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

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

September 2014

Sweet Home Cemetery/2643
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Sweet Home Cemetery/2643

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
Sweet Home Cemetery/2643

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

INDEPENDENT EMPLOYERS

Sweet Home Cemetery -- #2643

September 2014

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Executive Summary

Milliman has prepared this report for Sweet Home Cemetery to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Sweet Home Cemetery.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Sweet Home Cemetery

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	13.96%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	3.13%	3.13%	3.13%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	17.70%	11.07%	15.18%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	18.23%	11.52%	15.63%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 91%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	17.09%	17.09%
Minimum July 1, 2017 Rate	13.67%	10.25%
Maximum July 1, 2017 Rate	20.51%	23.93%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$456,186	\$624,677	\$168,491	73%	\$106,308	158%
12/31/2009	542,212	681,951	139,739	80%	108,913	128%
12/31/2010	612,989	739,059	126,070	83%	111,990	113%
12/31/2011	350,642	511,257	160,615	69%	27,288	589%
12/31/2012	388,006	464,278	76,272	84%	84,731	90%
12/31/2013	441,442	485,592	44,150	91%	107,083	41%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Sweet Home Cemetery

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$44,150	\$76,271
Allocated pooled OPSRP UAL	7,571	5,972
Side account	0	0
Net unfunded pension actuarial accrued liability	51,721	82,243
Combined valuation payroll	107,083	84,731
Net pension UAL as a percentage of payroll	48%	97%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,482	\$1,778

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$5,283	\$5,168
Tier 1/Tier 2 valuation payroll	37,849	37,090
Tier 1/Tier 2 pension normal cost rate	13.96%	13.93%
Tier 1/ Tier 2 Actuarial accrued liability	\$485,592	\$464,278
Actuarial asset value	441,442	388,007
Tier 1/Tier 2 Unfunded actuarial accrued liability	44,150	76,271
Tier 1/ Tier 2 Funded status	91%	84%
Combined valuation payroll	\$107,083	\$84,731
Tier 1/Tier 2 UAL as a percentage of payroll	41%	90%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	3.13%	5.59%
Tier 1/Tier 2 active members ¹	1	1
Tier 1/Tier 2 dormant members	1	1
Tier 1/Tier 2 retirees and beneficiaries	2	2

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	107,083	84,731
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$80,193	\$72,338
2. Employer reserves	172,428	135,594
3. Benefits in force reserve	188,821	180,075
4. Total market value of assets (1. + 2. + 3.)	\$441,442	\$388,007

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$388,007
2. Regular employer contributions	13,650
3. Benefit payments and expense	(29,230)
4. Adjustments ²	13,002
5. Interest credited	56,014
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$441,442

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	5,283	5,168
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	\$5,283	\$5,168

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$5,283	\$5,283	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	123,027	107,305
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$123,027	\$107,305
Dormant Members	58,192	53,523
Retired Members and Beneficiaries	304,373	303,450
Total Actuarial Accrued Liability	\$485,592	\$464,278

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$485,592	\$485,592	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$485,592	\$464,278
2. Actuarial value of assets	441,442	388,007
3. Unfunded accrued liability (1. – 2.)	44,150	76,271
4. Funded percentage (2. ÷ 1.)	91%	84%
5. Combined valuation payroll	\$107,083	\$84,731
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	41%	90%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$44,150	\$3,196
Total				\$44,150	\$3,196

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$464,278
b. Normal cost at December 31, 2012	5,168
c. Benefit payments during 2013	(28,998)
d. Interest at 7.75% to December 31, 2013	35,258
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	475,706
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	475,706
2. Actuarial accrued liability at December 31, 2013	485,592
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(9,886)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	388,007
b. Contributions for 2013 ¹	13,650
c. Benefit payments and expenses during 2013	(29,230)
d. Interest at 7.75% to December 31, 2013	29,467
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	401,893
5. Actuarial value of assets at December 31, 2013	441,442
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	39,549
7. Total actuarial gain/(loss) (3. + 6.)	\$29,663

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$76,271
2. Expected increase	(2,458)
3. Liability (gain)/loss	9,886
4. Asset (gain)/loss	(39,549)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$44,150

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	5,283	37,849	13.96%	5,168	37,090	13.93%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$5,283	\$37,849	13.96%	\$5,168	\$37,090	13.93%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$44,150	\$76,271
2. Next year's Tier 1/Tier 2 UAL payment	3,196	5,520
3. Combined valuation payroll	107,083	84,731
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	2.98%	6.51%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.96%	13.93%
b. Tier 1/Tier 2 UAL rate	2.98%	6.51%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	17.09%	20.57%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	16.27%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	16.27%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	3.25%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.25%
c. Funded percentage	91%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.25%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	13.02%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	19.52%
7. July 1, 2015 total pension rate, before adjustment	17.09%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	2.98%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	2.98%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	17.09%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	13.96%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	13.96%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	17.09%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.96%	13.93%
b. Tier 1/Tier 2 UAL rate	2.98%	5.46%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	17.09%	19.52%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$37,849	\$0	\$37,849
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	37,849	0	37,849
OPSRP valuation payroll	69,234	0	69,234
Combined valuation payroll	\$107,083	\$0	\$107,083

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	1	0	2	3	1	0	1	2
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	2	3	1	0	1	2
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	1	0	1	0	1	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	1	0	1
Retired Members and Beneficiaries								
General Service	2	0	0	2	2	0	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	2	0	0	2	2	0	0	2
Grand Total Number of Members	3	1	2	6	3	1	1	5

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54					1					1
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	0	0	1	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64	1	1,694
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59	1	466	80-84		
60-64			85-89	1	708
65-69			90-94		
70-74			95-99		
75+			100+		
Total	1	466	Total	2	1,201

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.



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

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

September 2014

Tillamook 9-1-1/2722

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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Tillamook 9-1-1/2722

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
Tillamook 9-1-1/2722

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

INDEPENDENT EMPLOYERS

Tillamook 9-1-1 -- #2722

September 2014

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Executive Summary

Milliman has prepared this report for Tillamook 9-1-1 to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Tillamook 9-1-1.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Tillamook 9-1-1

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	13.85%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(8.38%)	(8.38%)	(8.38%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	6.08%	0.00%	3.67%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	6.61%	0.45%	4.12%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 137%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	5.47%	5.47%
Minimum July 1, 2017 Rate	2.47%	0.00%
Maximum July 1, 2017 Rate	8.47%	11.47%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$1,378,769	\$1,363,027	(\$15,742)	101%	\$482,292	(3%)
12/31/2009	1,613,075	1,537,544	(75,531)	105%	522,840	(14%)
12/31/2010	1,755,810	1,582,886	(172,924)	111%	488,423	(35%)
12/31/2011	1,800,706	1,660,388	(140,318)	108%	561,258	(25%)
12/31/2012	2,056,968	1,641,966	(415,002)	125%	525,267	(79%)
12/31/2013	2,338,997	1,713,100	(625,897)	137%	530,964	(118%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Tillamook 9-1-1

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$625,897)	(\$415,002)
Allocated pooled OPSRP UAL	37,542	37,022
Side account	0	0
Net unfunded pension actuarial accrued liability	(588,355)	(377,980)
Combined valuation payroll	530,964	525,267
Net pension UAL as a percentage of payroll	(111%)	(72%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$7,349	\$11,020

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$27,902	\$27,414
Tier 1/Tier 2 valuation payroll	236,239	232,176
Tier 1/Tier 2 pension normal cost rate	13.85%	11.81%
Tier 1/ Tier 2 Actuarial accrued liability	\$1,713,100	\$1,641,966
Actuarial asset value	2,338,997	2,056,968
Tier 1/Tier 2 Unfunded actuarial accrued liability	(625,897)	(415,002)
Tier 1/ Tier 2 Funded status	137%	125%
Combined valuation payroll	\$530,964	\$525,267
Tier 1/Tier 2 UAL as a percentage of payroll	(118%)	(79%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(8.38%)	(5.59%)
Tier 1/Tier 2 active members ¹	4	4
Tier 1/Tier 2 dormant members	5	6
Tier 1/Tier 2 retirees and beneficiaries	3	3

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	530,964	525,267
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$695,563	\$628,354
2. Employer reserves	1,479,845	1,271,434
3. Benefits in force reserve	163,588	157,180
4. Total market value of assets (1. + 2. + 3.)	\$2,338,997	\$2,056,968

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$2,056,968
2. Regular employer contributions	9,339
3. Benefit payments and expense	(25,324)
4. Adjustments ²	13,974
5. Interest credited	284,040
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$2,338,997

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	19,565	19,733
Tier 2 Police & Fire	0	0
Tier 2 General Service	8,337	7,681
Total	\$27,902	\$27,414

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$27,902	\$27,902	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	554,576	630,829
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	230,767	169,885
▪ Total Active Members	\$785,343	\$800,714
Dormant Members	664,059	576,382
Retired Members and Beneficiaries	263,698	264,870
Total Actuarial Accrued Liability	\$1,713,100	\$1,641,966

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$1,713,100	\$1,713,100	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$1,713,100	\$1,641,966
2. Actuarial value of assets	2,338,997	2,056,968
3. Unfunded accrued liability (1. – 2.)	(625,897)	(415,002)
4. Funded percentage (2. ÷ 1.)	137%	125%
5. Combined valuation payroll	\$530,964	\$525,267
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(118%)	(79%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$625,897)	(\$45,302)
Total				(\$625,897)	(\$45,302)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$1,641,966
b. Normal cost at December 31, 2012	27,414
c. Benefit payments during 2013	(25,123)
d. Interest at 7.75% to December 31, 2013	128,403
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	1,772,660
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	1,772,660
2. Actuarial accrued liability at December 31, 2013	1,713,100
3. Gain/(loss) on actuarial accrued liability (1.g. – 2.)	59,560
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,056,968
b. Contributions for 2013 ¹	9,339
c. Benefit payments and expenses during 2013	(25,324)
d. Interest at 7.75% to December 31, 2013	158,796
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	2,199,779
5. Actuarial value of assets at December 31, 2013	2,338,997
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	139,218
7. Total actuarial gain/(loss) (3. + 6.)	\$198,778

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$415,002)
2. Expected increase	(12,117)
3. Liability (gain)/loss	(59,560)
4. Asset (gain)/loss	(139,218)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$625,897)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	19,565	136,879	14.29%	19,733	140,937	14.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	8,337	99,360	8.39%	7,681	91,239	8.42%
Total	\$27,902	\$236,239	11.81%	\$27,414	\$232,176	11.81%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$625,897)	(\$415,002)
2. Next year's Tier 1/Tier 2 UAL payment	(45,302)	(30,038)
3. Combined valuation payroll	530,964	525,267
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(8.53%)	(5.72%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	11.81%	11.81%
b. Tier 1/Tier 2 UAL rate	(8.53%)	(5.72%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	3.43%	6.22%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	5.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	5.41%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.08%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	137%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	5.10%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	0.31%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	10.51%
7. July 1, 2015 total pension rate, before adjustment	3.43%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(8.53%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(8.53%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	3.43%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	2.04%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	11.81%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	13.85%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	5.47%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.85%	11.81%
b. Tier 1/Tier 2 UAL rate	(8.53%)	(5.72%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	5.47%	6.22%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$136,879	\$0	\$136,879
Tier 2	99,360	0	99,360
Tier 1/Tier 2 valuation payroll	236,239	0	236,239
OPSRP valuation payroll	294,725	0	294,725
Combined valuation payroll	\$530,964	\$0	\$530,964

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	2	2	8	12	2	2	8	12
Police & Fire	0	0	0	0	0	0	0	0
Total	2	2	8	12	2	2	8	12
Active Members with previous service segments with the employer								
General Service	5	4	N/A	9	3	2	N/A	5
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	5	4	N/A	9	3	2	N/A	5
Dormant Members								
General Service	5	0	0	5	5	1	0	6
Police & Fire	0	0	0	0	0	0	0	0
Total	5	0	0	5	5	1	0	6
Retired Members and Beneficiaries								
General Service	3	0	0	3	3	0	0	3
Police & Fire	0	0	0	0	0	0	0	0
Total	3	0	0	3	3	0	0	3
Grand Total Number of Members	15	6	8	29	13	5	8	26

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34		1								1
35-39										
40-44			1							1
45-49					2					2
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	1	1	0	2	0	0	0	0	4

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64	1	179
40-44	1	2,352	65-69	2	938
45-49	1	1,931	70-74		
50-54	3	1,326	75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	5	1,652	Total	3	685

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.



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

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

September 2014

Tillamook County Soil And Water Conservation District/2821
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014

Tillamook County Soil And Water Conservation District/2821

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.

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
Tillamook County Soil And Water Conservation District/2821

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

INDEPENDENT EMPLOYERS

Tillamook County Soil And Water Conservation District -- #2821

September 2014

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Executive Summary

Milliman has prepared this report for Tillamook County Soil And Water Conservation District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Tillamook County Soil And Water Conservation District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Tillamook County Soil And Water Conservation District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	11.84%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	0.44%	0.44%	0.44%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	12.89%	8.38%	12.49%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	13.42%	8.83%	12.94%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 99%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	12.28%	12.28%
Minimum July 1, 2017 Rate	9.28%	6.28%
Maximum July 1, 2017 Rate	15.28%	18.28%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$117,920	\$186,756	\$68,836	63%	\$73,289	94%
12/31/2009	160,075	207,194	47,119	77%	74,841	63%
12/31/2010	224,527	251,501	26,974	89%	62,899	43%
12/31/2011	238,346	275,346	37,000	87%	58,527	63%
12/31/2012	285,362	301,823	16,461	95%	63,910	26%
12/31/2013	343,758	346,692	2,934	99%	73,887	4%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Tillamook County Soil And Water Conservation District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$2,934	\$16,461
Allocated pooled OPSRP UAL	5,224	4,505
Side account	0	0
Net unfunded pension actuarial accrued liability	8,158	20,966
Combined valuation payroll	73,887	63,910
Net pension UAL as a percentage of payroll	11%	33%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,023	\$1,341

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$8,749	\$6,713
Tier 1/Tier 2 valuation payroll	73,887	63,910
Tier 1/Tier 2 pension normal cost rate	11.84%	10.50%
Tier 1/ Tier 2 Actuarial accrued liability	\$346,692	\$301,823
Actuarial asset value	343,758	285,362
Tier 1/Tier 2 Unfunded actuarial accrued liability	2,934	16,461
Tier 1/ Tier 2 Funded status	99%	95%
Combined valuation payroll	\$73,887	\$63,910
Tier 1/Tier 2 UAL as a percentage of payroll	4%	26%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	0.44%	1.99%
Tier 1/Tier 2 active members ¹	2	2
Tier 1/Tier 2 dormant members	3	3
Tier 1/Tier 2 retirees and beneficiaries	0	0

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	73,887	63,910
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$81,769	\$68,858
2. Employer reserves	261,989	216,504
3. Benefits in force reserve	0	0
4. Total market value of assets (1. + 2. + 3.)	\$343,758	\$285,362

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$285,362
2. Regular employer contributions	10,204
3. Benefit payments and expense	0
4. Adjustments ²	531
5. Interest credited	47,661
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$343,758

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	1,466	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	7,283	6,713
Total	\$8,749	\$6,713

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$8,749	\$8,749	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	25,526	22,320
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	221,194	193,399
▪ Total Active Members	\$246,720	\$215,719
Dormant Members	99,972	86,104
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	\$346,692	\$301,823

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$346,692	\$346,692	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$346,692	\$301,823
2. Actuarial value of assets	343,758	285,362
3. Unfunded accrued liability (1. – 2.)	2,934	16,461
4. Funded percentage (2. ÷ 1.)	99%	95%
5. Combined valuation payroll	\$73,887	\$63,910
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	4%	26%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$2,934	\$212
Total				\$2,934	\$212

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$301,823
b. Normal cost at December 31, 2012	6,713
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	23,912
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	332,448
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	332,448
2. Actuarial accrued liability at December 31, 2013	346,692
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(14,244)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	285,362
b. Contributions for 2013 ¹	10,204
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	22,511
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	318,077
5. Actuarial value of assets at December 31, 2013	343,758
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	25,681
7. Total actuarial gain/(loss) (3. + 6.)	\$11,437

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$16,461
2. Expected increase	(2,090)
3. Liability (gain)/loss	14,244
4. Asset (gain)/loss	(25,681)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$2,934

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	1,466	7,208	20.34%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	7,283	66,679	10.92%	6,713	63,910	10.50%
Total	\$8,749	\$73,887	11.84%	\$6,713	\$63,910	10.50%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$2,934	\$16,461
2. Next year's Tier 1/Tier 2 UAL payment	212	1,191
3. Combined valuation payroll	73,887	63,910
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	0.29%	1.86%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	11.84%	10.50%
b. Tier 1/Tier 2 UAL rate	0.29%	1.86%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	12.28%	12.49%
<i>(a. + b. + c.)</i>		

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	13.69%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	13.69%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	2.74%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	99%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	10.69%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	16.69%
7. July 1, 2015 total pension rate, before adjustment	12.28%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.29%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	0.29%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.28%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	11.84%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	11.84%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	12.28%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	11.84%	10.50%
b. Tier 1/Tier 2 UAL rate	0.29%	1.86%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	12.28%	12.49%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$7,208	\$0	\$7,208
Tier 2	66,679	0	66,679
Tier 1/Tier 2 valuation payroll	73,887	0	73,887
OPSRP valuation payroll	0	0	0
Combined valuation payroll	\$73,887	\$0	\$73,887

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	2	0	2	0	2	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	2	0	2
Active Members with previous service segments with the employer								
General Service	1	1	N/A	2	0	1	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	1	1	N/A	2	0	1	N/A	1
Dormant Members								
General Service	0	3	0	3	0	3	0	3
Police & Fire	0	0	0	0	0	0	0	0
Total	0	3	0	3	0	3	0	3
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Grand Total Number of Members	1	6	0	7	0	6	0	6

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59				1						1
60-64				1						1
65-69										
70-74										
75+										
Total	0	0	0	2	0	0	0	0	0	2

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44	1	12	65-69		
45-49	1	547	70-74		
50-54			75-79		
55-59	1	471	80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	3	343	Total		

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.



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

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

September 2014

Tillamook Fire District/2783
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Tillamook Fire District/2783

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
Tillamook Fire District/2783

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

INDEPENDENT EMPLOYERS

Tillamook Fire District -- #2783

September 2014

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Executive Summary

Milliman has prepared this report for Tillamook Fire District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Tillamook Fire District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Tillamook Fire District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	16.11%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(3.27%)	(3.27%)	(3.27%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	13.45%	4.67%	8.78%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	13.98%	5.12%	9.23%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 113%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	12.84%	12.84%
Minimum July 1, 2017 Rate	9.84%	6.84%
Maximum July 1, 2017 Rate	15.84%	18.84%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$596,084	\$642,641	\$46,557	93%	\$235,076	20%
12/31/2009	668,508	632,050	(36,458)	106%	196,215	(19%)
12/31/2010	737,343	675,041	(62,302)	109%	208,067	(30%)
12/31/2011	755,393	729,306	(26,087)	104%	265,563	(10%)
12/31/2012	863,045	819,757	(43,288)	105%	273,216	(16%)
12/31/2013	993,298	880,246	(113,052)	113%	279,546	(40%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Tillamook Fire District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$113,052)	(\$43,288)
Allocated pooled OPSRP UAL	19,766	19,257
Side account	0	0
Net unfunded pension actuarial accrued liability	(93,286)	(24,031)
Combined valuation payroll	279,546	273,216
Net pension UAL as a percentage of payroll	(33%)	(9%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$3,869	\$5,732

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$35,288	\$34,343
Tier 1/Tier 2 valuation payroll	219,003	214,619
Tier 1/Tier 2 pension normal cost rate	16.11%	16.00%
Tier 1/ Tier 2 Actuarial accrued liability	\$880,246	\$819,757
Actuarial asset value	993,298	863,045
Tier 1/Tier 2 Unfunded actuarial accrued liability	(113,052)	(43,288)
Tier 1/ Tier 2 Funded status	113%	105%
Combined valuation payroll	\$279,546	\$273,216
Tier 1/Tier 2 UAL as a percentage of payroll	(40%)	(16%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(3.27%)	(3.16%)
Tier 1/Tier 2 active members ¹	3	3
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	5	5

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	279,546	273,216
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$78,818	\$72,317
2. Employer reserves	731,792	615,947
3. Benefits in force reserve	182,688	174,781
4. Total market value of assets (1. + 2. + 3.)	\$993,298	\$863,045

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$863,045
2. Regular employer contributions	17,371
3. Benefit payments and expense	(28,281)
4. Adjustments ²	11,753
5. Interest credited	129,409
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$993,298

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$15,748	\$15,199
Tier 1 General Service	0	0
Tier 2 Police & Fire	19,540	19,144
Tier 2 General Service	0	0
Total	\$35,288	\$34,343

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$35,288	\$35,288	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$335,938	\$306,807
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	249,822	218,419
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$585,760	\$525,226
Dormant Members	0	0
Retired Members and Beneficiaries	294,486	294,531
Total Actuarial Accrued Liability	\$880,246	\$819,757

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$880,246	\$880,246	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$880,246	\$819,757
2. Actuarial value of assets	993,298	863,045
3. Unfunded accrued liability (1. – 2.)	(113,052)	(43,288)
4. Funded percentage (2. ÷ 1.)	113%	105%
5. Combined valuation payroll	\$279,546	\$273,216
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(40%)	(16%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$113,052)	(\$8,183)
Total				(\$113,052)	(\$8,183)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$819,757
b. Normal cost at December 31, 2012	34,343
c. Benefit payments during 2013	(28,056)
d. Interest at 7.75% to December 31, 2013	65,106
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	891,150
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	891,150
2. Actuarial accrued liability at December 31, 2013	880,246
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	10,904
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	863,045
b. Contributions for 2013 ¹	17,371
c. Benefit payments and expenses during 2013	(28,281)
d. Interest at 7.75% to December 31, 2013	66,463
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	918,599
5. Actuarial value of assets at December 31, 2013	993,298
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	74,699
7. Total actuarial gain/(loss) (3. + 6.)	\$85,603

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$43,288)
2. Expected increase	15,839
3. Liability (gain)/loss	(10,904)
4. Asset (gain)/loss	(74,699)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$113,052)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$15,748	\$85,858	18.34%	\$15,199	\$83,373	18.23%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	19,540	133,145	14.68%	19,144	131,246	14.59%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$35,288	\$219,003	16.11%	\$34,343	\$214,619	16.00%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$113,052)	(\$43,288)
2. Next year's Tier 1/Tier 2 UAL payment	(8,183)	(3,133)
3. Combined valuation payroll	279,546	273,216
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(2.93%)	(1.15%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	16.11%	16.00%
b. Tier 1/Tier 2 UAL rate	(2.93%)	(1.15%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	13.33%	14.98%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	9.84%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	9.84%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.97%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	113%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	6.84%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	12.84%
7. July 1, 2015 total pension rate, before adjustment	13.33%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(0.49%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(2.93%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(3.42%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.84%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	16.11%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	16.11%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	12.84%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	16.11%	16.00%
b. Tier 1/Tier 2 UAL rate	(3.42%)	(3.29%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	12.84%	12.84%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$85,858	\$85,858
Tier 2	0	133,145	133,145
Tier 1/Tier 2 valuation payroll	0	219,003	219,003
OPSRP valuation payroll	0	60,543	60,543
Combined valuation payroll	\$0	\$279,546	\$279,546

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	0	0	0	0	0	0
Police & Fire	1	2	1	4	1	2	1	4
Total	1	2	1	4	1	2	1	4
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	1	0	0	1	1	0	0	1
Police & Fire	4	0	0	4	3	1	0	4
Total	5	0	0	5	4	1	0	5
Grand Total Number of Members	6	2	1	9	5	3	1	9

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39			1							1
40-44										
45-49			1							1
50-54										
55-59				1						1
60-64										
65-69										
70-74										
75+										
Total	0	0	2	1	0	0	0	0	0	3

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64	2	608
40-44			65-69	3	302
45-49			70-74		
50-54			75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total	5	425

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.



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

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

September 2014

Town of Butte Falls/2253
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Town of Butte Falls/2253

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
Town of Butte Falls/2253

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

INDEPENDENT EMPLOYERS

Town of Butte Falls -- #2253

September 2014

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Executive Summary

Milliman has prepared this report for Town of Butte Falls to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Town of Butte Falls.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Town of Butte Falls

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	25.83%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(17.42%)	(17.42%)	(17.42%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	9.02%	0.00%	0.00%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	9.55%	0.45%	0.45%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 125%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	8.41%	8.41%
Minimum July 1, 2017 Rate	5.41%	2.41%
Maximum July 1, 2017 Rate	11.41%	14.41%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$161,386	\$168,410	\$7,024	96%	\$78,132	9%
12/31/2009	183,862	167,980	(15,882)	109%	107,885	(15%)
12/31/2010	197,488	178,619	(18,869)	111%	112,140	(17%)
12/31/2011	198,605	200,004	1,399	99%	86,198	2%
12/31/2012	227,332	191,168	(36,164)	119%	55,627	(65%)
12/31/2013	260,079	208,272	(51,807)	125%	74,444	(70%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Town of Butte Falls

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$51,807)	(\$36,164)
Allocated pooled OPSRP UAL	5,264	3,921
Side account	0	0
Net unfunded pension actuarial accrued liability	(46,543)	(32,243)
Combined valuation payroll	74,444	55,627
Net pension UAL as a percentage of payroll	(63%)	(58%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,030	\$1,167

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$4,948	\$4,748
Tier 1/Tier 2 valuation payroll	19,159	18,229
Tier 1/Tier 2 pension normal cost rate	25.83%	26.05%
Tier 1/ Tier 2 Actuarial accrued liability	\$208,272	\$191,168
Actuarial asset value	260,079	227,332
Tier 1/Tier 2 Unfunded actuarial accrued liability	(51,807)	(36,164)
Tier 1/ Tier 2 Funded status	125%	119%
Combined valuation payroll	\$74,444	\$55,627
Tier 1/Tier 2 UAL as a percentage of payroll	(70%)	(65%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(17.42%)	(17.64%)
Tier 1/Tier 2 active members ¹	1	1
Tier 1/Tier 2 dormant members	4	4
Tier 1/Tier 2 retirees and beneficiaries	3	3

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	74,444	55,627
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$53,141	\$47,730
2. Employer reserves	186,570	160,045
3. Benefits in force reserve	20,368	19,558
4. Total market value of assets (1. + 2. + 3.)	\$260,079	\$227,332

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$227,332
2. Regular employer contributions	1,425
3. Benefit payments and expense	(3,153)
4. Adjustments ²	1,490
5. Interest credited	32,985
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$260,079

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$4,603	\$4,410
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	345	338
Total	\$4,948	\$4,748

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$4,948	\$4,948	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$43,797	\$34,941
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	30,010	29,065
▪ Tier 2 General Service	1,576	1,500
▪ Total Active Members	\$75,383	\$65,506
Dormant Members	100,057	92,704
Retired Members and Beneficiaries	32,832	32,958
Total Actuarial Accrued Liability	\$208,272	\$191,168

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$208,272	\$208,272	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$208,272	\$191,168
2. Actuarial value of assets	260,079	227,332
3. Unfunded accrued liability (1. – 2.)	(51,807)	(36,164)
4. Funded percentage (2. ÷ 1.)	125%	119%
5. Combined valuation payroll	\$74,444	\$55,627
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(70%)	(65%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$51,807)	(\$3,750)
Total				(\$51,807)	(\$3,750)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$191,168
b. Normal cost at December 31, 2012	4,748
c. Benefit payments during 2013	(3,128)
d. Interest at 7.75% to December 31, 2013	15,062
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	207,850
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	207,850
2. Actuarial accrued liability at December 31, 2013	208,272
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(422)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	227,332
b. Contributions for 2013 ¹	1,425
c. Benefit payments and expenses during 2013	(3,153)
d. Interest at 7.75% to December 31, 2013	17,551
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	243,155
5. Actuarial value of assets at December 31, 2013	260,079
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	16,924
7. Total actuarial gain/(loss) (3. + 6.)	\$16,502

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$36,164)
2. Expected increase	859
3. Liability (gain)/loss	422
4. Asset (gain)/loss	(16,924)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$51,807)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$4,603	\$16,191	28.43%	\$4,410	\$15,310	28.80%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	345	2,968	11.62%	338	2,919	11.58%
Total	\$4,948	\$19,159	25.83%	\$4,748	\$18,229	26.05%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$51,807)	(\$36,164)
2. Next year's Tier 1/Tier 2 UAL payment	(3,750)	(2,618)
3. Combined valuation payroll	74,444	55,627
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(5.04%)	(4.71%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	25.83%	26.05%
b. Tier 1/Tier 2 UAL rate	(5.04%)	(4.71%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	20.94%	21.47%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	5.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	5.41%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.08%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	125%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	2.41%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	8.41%
7. July 1, 2015 total pension rate, before adjustment	20.94%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(12.53%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(5.04%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(17.57%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.41%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	25.83%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	25.83%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	8.41%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	25.83%	26.05%
b. Tier 1/Tier 2 UAL rate	(17.57%)	(17.77%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	8.41%	8.41%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$16,191	\$16,191
Tier 2	2,968	0	2,968
Tier 1/Tier 2 valuation payroll	2,968	16,191	19,159
OPSRP valuation payroll	17,035	38,250	55,285
Combined valuation payroll	\$20,003	\$54,441	\$74,444

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	1	1	0	0	0	0
Police & Fire	1	0	1	2	1	0	1	2
Total	1	0	2	3	1	0	1	2
Active Members with previous service segments with the employer								
General Service	0	1	N/A	1	0	1	N/A	1
Police & Fire	1	1	N/A	2	1	0	N/A	1
Total	1	2	N/A	3	1	1	N/A	2
Dormant Members								
General Service	0	0	1	1	0	0	1	1
Police & Fire	1	3	0	4	1	3	0	4
Total	1	3	1	5	1	3	1	5
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	2	1	0	3	2	1	0	3
Total	2	1	0	3	2	1	0	3
Grand Total Number of Members	5	6	3	14	5	5	2	12

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49				1						1
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	0	1	0	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64	1	90
40-44	1	318	65-69	1	86
45-49	2	34	70-74		
50-54			75-79		
55-59	1	483	80-84	1	112
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	4	217	Total	3	96

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.



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

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

September 2014

Tri-County Cooperative Weed Management Area/2865
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Tri-County Cooperative Weed Management Area/2865

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
Tri-County Cooperative Weed Management Area/2865

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

INDEPENDENT EMPLOYERS

Tri-County Cooperative Weed Management Area -- #2865

September 2014

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Executive Summary

Milliman has prepared this report for Tri-County Cooperative Weed Management Area to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Tri-County Cooperative Weed Management Area.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Tri-County Cooperative Weed Management Area

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	14.24%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(2.77%)	(2.77%)	(2.77%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	12.08%	5.17%	9.28%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	12.61%	5.62%	9.73%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 100%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	11.47%	11.47%
Minimum July 1, 2017 Rate	8.47%	5.47%
Maximum July 1, 2017 Rate	14.47%	17.47%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	(\$99)	\$0	\$99	0%	\$76,517	0%
12/31/2009	(155)	0	155	0%	76,926	0%
12/31/2010	(252)	0	252	0%	113,522	0%
12/31/2011	(275)	0	275	100%	114,758	0%
12/31/2012	(295)	0	295	0%	96,745	0%
12/31/2013	(1,440)	0	1,440	0%	91,490	2%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Tri-County Cooperative Weed Management Area

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$1,440	\$295
Allocated pooled OPSRP UAL	6,469	6,819
Side account	0	0
Net unfunded pension actuarial accrued liability	7,909	7,114
Combined valuation payroll	91,490	96,745
Net pension UAL as a percentage of payroll	9%	7%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,266	\$2,030

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$0	\$0
Tier 1/Tier 2 valuation payroll	0	0
Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
Tier 1/ Tier 2 Actuarial accrued liability	\$0	\$0
Actuarial asset value	(1,440)	(295)
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,440	295
Tier 1/ Tier 2 Funded status	0%	0%
Combined valuation payroll	\$91,490	\$96,745
Tier 1/Tier 2 UAL as a percentage of payroll	2%	0%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(2.77%)	0.15%
Tier 1/Tier 2 active members ¹	0	0
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	0	0

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	91,490	96,745
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$0	\$0
2. Employer reserves	(1,440)	(295)
3. Benefits in force reserve	0	0
4. Total market value of assets (1. + 2. + 3.)	(\$1,440)	(\$295)

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	(\$295)
2. Regular employer contributions	(877)
3. Benefit payments and expense	0
4. Adjustments ²	(110)
5. Interest credited	(159)
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	(\$1,440)

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	\$0	\$0

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$0	\$0	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$0	\$0
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	\$0	\$0

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$0	\$0	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$0	\$0
2. Actuarial value of assets	(1,440)	(295)
3. Unfunded accrued liability (1. – 2.)	1,440	295
4. Funded percentage (2. ÷ 1.)	100%	100%
5. Combined valuation payroll	\$91,490	\$96,745
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	2%	0%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$1,440	\$104
Total				\$1,440	\$104

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$0
b. Normal cost at December 31, 2012	0
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	0
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	0
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	0
2. Actuarial accrued liability at December 31, 2013	0
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	0
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	(295)
b. Contributions for 2013 ¹	(877)
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	(57)
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	(1,228)
5. Actuarial value of assets at December 31, 2013	(1,440)
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	(212)
7. Total actuarial gain/(loss) (3. + 6.)	(\$212)

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$295
2. Expected increase	933
3. Liability (gain)/loss	0
4. Asset (gain)/loss	212
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$1,440

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$0	\$0	14.24%	\$0	\$0	14.33%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$1,440	\$295
2. Next year's Tier 1/Tier 2 UAL payment	104	21
3. Combined valuation payroll	91,490	96,745
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	0.11%	0.02%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
b. Tier 1/Tier 2 UAL rate	0.11%	0.02%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	14.50%	14.48%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	8.47%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	8.47%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.69%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	100%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	5.47%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	11.47%
7. July 1, 2015 total pension rate, before adjustment	14.50%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(3.03%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.11%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(2.92%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.47%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	14.24%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	14.24%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	11.47%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
b. Tier 1/Tier 2 UAL rate	(2.92%)	0.02%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	11.47%	14.48%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	0	0
OPSRP valuation payroll	91,490	0	91,490
Combined valuation payroll	\$91,490	\$0	\$91,490

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	2	2	0	0	2	2
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	2	2	0	0	2	2
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Grand Total Number of Members	0	0	2	2	0	0	2	2

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	0	0	0	0	0	0	0	0

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total		

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.



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

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

September 2014

Turner Fire District/2610
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Turner Fire District/2610

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
Turner Fire District/2610

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

INDEPENDENT EMPLOYERS

Turner Fire District -- #2610

September 2014

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Executive Summary

Milliman has prepared this report for Turner Fire District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Turner Fire District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Turner Fire District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	19.21%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(4.74%)	(4.74%)	(4.74%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	15.08%	3.20%	7.31%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	15.61%	3.65%	7.76%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 120%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	14.47%	14.47%
Minimum July 1, 2017 Rate	11.47%	8.47%
Maximum July 1, 2017 Rate	17.47%	20.47%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$0	\$0	\$0	0%	\$0	0%
12/31/2009	0	0	0	0%	0	0%
12/31/2010	0	0	0	0%	0	0%
12/31/2011	0	0	0	0%	0	0%
12/31/2012	1,274,813	1,088,856	(185,957)	117%	336,946	(55%)
12/31/2013	1,424,608	1,184,515	(240,093)	120%	355,304	(68%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Turner Fire District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$240,093)	(\$185,957)
Allocated pooled OPSRP UAL	25,122	23,749
Side account	0	0
Net unfunded pension actuarial accrued liability	(214,971)	(162,208)
Combined valuation payroll	355,304	336,946
Net pension UAL as a percentage of payroll	(61%)	(48%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$4,918	\$7,069

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$17,489	\$17,161
Tier 1/Tier 2 valuation payroll	91,063	102,915
Tier 1/Tier 2 pension normal cost rate	19.21%	16.67%
Tier 1/ Tier 2 Actuarial accrued liability	\$1,184,515	\$1,088,856
Actuarial asset value	1,424,608	1,274,813
Tier 1/Tier 2 Unfunded actuarial accrued liability	(240,093)	(185,957)
Tier 1/ Tier 2 Funded status	120%	117%
Combined valuation payroll	\$355,304	\$336,946
Tier 1/Tier 2 UAL as a percentage of payroll	(68%)	(55%)
Tier 1/Tier 2 UAL rate	(4.74%)	(3.86%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members ¹	1	1
Tier 1/Tier 2 dormant members	7	7
Tier 1/Tier 2 retirees and beneficiaries	3	3

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	355,304	336,946
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$141,777	\$123,792
2. Employer reserves	969,105	853,425
3. Benefits in force reserve	313,726	297,596
4. Total market value of assets (1. + 2. + 3.)	\$1,424,608	\$1,274,813

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$1,274,813
2. Regular employer contributions	99,250
3. Benefit payments and expense	(48,566)
4. Adjustments ²	(90,951)
5. Interest credited	190,062
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$1,424,608

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$17,489	\$17,161
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	\$17,489	\$17,161

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$17,489	\$17,489	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$498,840	\$418,836
▪ Tier 1 General Service	914	740
▪ Tier 2 Police & Fire	100,555	96,564
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$600,309	\$516,140
Dormant Members	78,491	71,225
Retired Members and Beneficiaries	505,715	501,491
Total Actuarial Accrued Liability	\$1,184,515	\$1,088,856

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$1,184,515	\$1,184,515	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$1,184,515	\$1,088,856
2. Actuarial value of assets	1,424,608	1,274,813
3. Unfunded accrued liability (1. – 2.)	(240,093)	(185,957)
4. Funded percentage (2. ÷ 1.)	120%	117%
5. Combined valuation payroll	\$355,304	\$336,946
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(68%)	(55%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$240,093)	(\$17,378)
Total				(\$240,093)	(\$17,378)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$1,088,856
b. Normal cost at December 31, 2012	17,161
c. Benefit payments during 2013	(48,181)
d. Interest at 7.75% to December 31, 2013	83,849
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	1,141,685
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	1,141,685
2. Actuarial accrued liability at December 31, 2013	1,184,515
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(42,830)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,274,813
b. Contributions for 2013 ¹	99,250
c. Benefit payments and expenses during 2013	(48,566)
d. Interest at 7.75% to December 31, 2013	100,762
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	1,426,259
5. Actuarial value of assets at December 31, 2013	1,424,608
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	(1,651)
7. Total actuarial gain/(loss) (3. + 6.)	(\$44,481)

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$185,957)
2. Expected increase	(98,617)
3. Liability (gain)/loss	42,830
4. Asset (gain)/loss	1,651
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$240,093)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$17,489	\$91,063	19.21%	\$17,161	\$102,915	16.67%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$17,489	\$91,063	19.21%	\$17,161	\$102,915	16.67%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$240,093)	(\$185,957)
2. Next year's Tier 1/Tier 2 UAL payment	(17,378)	(13,460)
3. Combined valuation payroll	355,304	336,946
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(4.89%)	(3.99%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	19.21%	16.67%
b. Tier 1/Tier 2 UAL rate	(4.89%)	(3.99%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	14.47%	12.81%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	14.47%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	14.47%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	N/A
b. Preliminary size of rate collar (maximum of 3% or a.)	N/A
c. Funded percentage	N/A
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	N/A
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	N/A
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	N/A
7. July 1, 2015 total pension rate, before adjustment	N/A
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	N/A
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	N/A
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	N/A
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	N/A
12. Tier 1/Tier 2 retiree healthcare rate	N/A
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	N/A
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	N/A
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	N/A
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	N/A

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	19.21%	16.67%
b. Tier 1/Tier 2 UAL rate	(4.89%)	(3.99%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	14.47%	12.81%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$91,063	\$91,063
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	91,063	91,063
OPSRP valuation payroll	71,497	192,744	264,241
Combined valuation payroll	\$71,497	\$283,807	\$355,304

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	2	2	0	0	1	1
Police & Fire	1	0	6	7	1	0	2	3
Total	1	0	8	9	1	0	3	4
Active Members with previous service segments with the employer								
General Service	1	0	N/A	1	0	0	N/A	0
Police & Fire	9	14	N/A	23	9	7	N/A	16
Total	10	14	N/A	24	9	7	N/A	16
Dormant Members								
General Service	0	1	0	1	0	1	0	1
Police & Fire	0	6	0	6	0	6	0	6
Total	0	7	0	7	0	7	0	7
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	3	0	0	3	3	0	0	3
Total	3	0	0	3	3	0	0	3
Grand Total Number of Members	14	21	8	43	13	14	3	30

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49					1					1
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	0	0	1	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34	1	394	55-59	2	17
35-39	1	177	60-64		
40-44	1	210	65-69	1	3,209
45-49	1	31	70-74		
50-54	2	192	75-79		
55-59			80-84		
60-64	1	919	85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	7	302	Total	3	1,081

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.



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

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

September 2014

Umatilla-Morrow Radio and Data District/2874
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014

Umatilla-Morrow Radio and Data District/2874

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
Umatilla-Morrow Radio and Data District/2874

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

INDEPENDENT EMPLOYERS

Umatilla-Morrow Radio and Data District -- #2874

September 2014

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Executive Summary

Milliman has prepared this report for Umatilla-Morrow Radio and Data District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Umatilla-Morrow Radio and Data District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Umatilla-Morrow Radio and Data District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	8.37%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(0.65%)	(0.65%)	(0.65%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	8.33%	7.29%	11.40%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	8.86%	7.74%	11.85%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 164%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	7.72%	7.72%
Minimum July 1, 2017 Rate	4.72%	1.72%
Maximum July 1, 2017 Rate	10.72%	13.72%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$0	\$0	\$0	0%	\$0	0%
12/31/2009	0	0	0	0%	0	0%
12/31/2010	0	0	0	0%	0	0%
12/31/2011	0	493	493	0%	64,245	1%
12/31/2012	18,250	10,753	(7,497)	170%	125,894	(6%)
12/31/2013	36,329	22,118	(14,211)	164%	128,162	(11%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Umatilla-Morrow Radio and Data District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$14,211)	(\$7,497)
Allocated pooled OPSRP UAL	9,062	8,873
Side account	0	0
Net unfunded pension actuarial accrued liability	(5,149)	1,376
Combined valuation payroll	128,162	125,894
Net pension UAL as a percentage of payroll	(4%)	1%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,774	\$2,641

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$10,726	\$10,427
Tier 1/Tier 2 valuation payroll	128,162	125,894
Tier 1/Tier 2 pension normal cost rate	8.37%	8.28%
Tier 1/ Tier 2 Actuarial accrued liability	\$22,118	\$10,753
Actuarial asset value	36,329	18,250
Tier 1/Tier 2 Unfunded actuarial accrued liability	(14,211)	(7,497)
Tier 1/ Tier 2 Funded status	164%	170%
Combined valuation payroll	\$128,162	\$125,894
Tier 1/Tier 2 UAL as a percentage of payroll	(11%)	(6%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(0.65%)	(0.30%)
Tier 1/Tier 2 active members ¹	2	2
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	0	0

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	128,162	125,894
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$0	\$0
2. Employer reserves	36,329	18,250
3. Benefits in force reserve	0	0
4. Total market value of assets (1. + 2. + 3.)	\$36,329	\$18,250

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$18,250
2. Regular employer contributions	13,272
3. Benefit payments and expense	0
4. Adjustments ²	(140)
5. Interest credited	4,948
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$36,329

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	10,726	10,427
Total	\$10,726	\$10,427

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$10,726	\$10,726	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	22,118	10,753
▪ Total Active Members	\$22,118	\$10,753
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	\$22,118	\$10,753

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$22,118	\$22,118	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$22,118	\$10,753
2. Actuarial value of assets	36,329	18,250
3. Unfunded accrued liability (1. – 2.)	(14,211)	(7,497)
4. Funded percentage (2. ÷ 1.)	164%	170%
5. Combined valuation payroll	\$128,162	\$125,894
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(11%)	(6%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$14,211)	(\$1,029)
Total				(\$14,211)	(\$1,029)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$10,753
b. Normal cost at December 31, 2012	10,427
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	1,641
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	22,821
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	22,821
2. Actuarial accrued liability at December 31, 2013	22,118
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	703
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	18,250
b. Contributions for 2013 ¹	13,272
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	1,929
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	33,450
5. Actuarial value of assets at December 31, 2013	36,329
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	2,879
7. Total actuarial gain/(loss) (3. + 6.)	\$3,582

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$7,497)
2. Expected increase	(3,132)
3. Liability (gain)/loss	(703)
4. Asset (gain)/loss	(2,879)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$14,211)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	10,726	128,162	8.37%	10,427	125,894	8.28%
Total	\$10,726	\$128,162	8.37%	\$10,427	\$125,894	8.28%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$14,211)	(\$7,497)
2. Next year's Tier 1/Tier 2 UAL payment	(1,029)	(543)
3. Combined valuation payroll	128,162	125,894
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(0.80%)	(0.43%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	8.37%	8.28%
b. Tier 1/Tier 2 UAL rate	(0.80%)	(0.43%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	7.72%	7.98%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	5.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	5.41%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.08%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	164%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	6.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	0.00%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	11.41%
7. July 1, 2015 total pension rate, before adjustment	7.72%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(0.80%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(0.80%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	7.72%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	8.37%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	8.37%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	7.72%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	8.37%	8.28%
b. Tier 1/Tier 2 UAL rate	(0.80%)	(0.43%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	7.72%	7.98%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	128,162	0	128,162
Tier 1/Tier 2 valuation payroll	128,162	0	128,162
OPSRP valuation payroll	0	0	0
Combined valuation payroll	\$128,162	\$0	\$128,162

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	2	0	2	0	2	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	2	0	2
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Grand Total Number of Members	0	2	0	2	0	2	0	2

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39			1							1
40-44			1							1
45-49										
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	2	0	0	0	0	0	0	2

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total		

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.



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

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

September 2014

Valley View Cemetery/2536
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Valley View Cemetery/2536

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
Valley View Cemetery/2536

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

INDEPENDENT EMPLOYERS

Valley View Cemetery -- #2536

September 2014

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Executive Summary

Milliman has prepared this report for Valley View Cemetery to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Valley View Cemetery.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Valley View Cemetery

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	20.73%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(15.26%)	(15.26%)	(15.26%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	6.08%	0.00%	0.00%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	6.61%	0.45%	0.45%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 1360%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	5.47%	5.47%
Minimum July 1, 2017 Rate	2.47%	0.00%
Maximum July 1, 2017 Rate	8.47%	11.47%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$77,029	\$26,660	(\$50,369)	289%	\$8,667	(581%)
12/31/2009	77,911	8,018	(69,893)	972%	16,000	(437%)
12/31/2010	87,303	8,851	(78,452)	986%	18,935	(414%)
12/31/2011	88,943	9,444	(79,499)	942%	39,559	(201%)
12/31/2012	101,364	7,927	(93,437)	1279%	33,825	(276%)
12/31/2013	116,935	8,598	(108,337)	1360%	38,133	(284%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Valley View Cemetery

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$108,337)	(\$93,437)
Allocated pooled OPSRP UAL	2,696	2,384
Side account	0	0
Net unfunded pension actuarial accrued liability	(105,641)	(91,053)
Combined valuation payroll	38,133	33,825
Net pension UAL as a percentage of payroll	(277%)	(269%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$528	\$710

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$714	\$664
Tier 1/Tier 2 valuation payroll	4,678	4,368
Tier 1/Tier 2 pension normal cost rate	20.73%	20.64%
Tier 1/ Tier 2 Actuarial accrued liability	\$8,598	\$7,927
Actuarial asset value	116,935	101,364
Tier 1/Tier 2 Unfunded actuarial accrued liability	(108,337)	(93,437)
Tier 1/ Tier 2 Funded status	1360%	1279%
Combined valuation payroll	\$38,133	\$33,825
Tier 1/Tier 2 UAL as a percentage of payroll	(284%)	(276%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(15.26%)	(15.20%)
Tier 1/Tier 2 active members ¹	0	0
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	1	1

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	38,133	33,825
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$0	\$0
2. Employer reserves	112,577	97,227
3. Benefits in force reserve	4,358	4,137
4. Total market value of assets (1. + 2. + 3.)	\$116,935	\$101,364

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$101,364
2. Regular employer contributions	199
3. Benefit payments and expense	(675)
4. Adjustments ²	255
5. Interest credited	15,792
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$116,935

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	714	664
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	\$714	\$664

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$714	\$714	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	1,573	956
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$1,573	\$956
Dormant Members	0	0
Retired Members and Beneficiaries	7,025	6,971
Total Actuarial Accrued Liability	\$8,598	\$7,927

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$8,598	\$8,598	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$8,598	\$7,927
2. Actuarial value of assets	116,935	101,364
3. Unfunded accrued liability (1. – 2.)	(108,337)	(93,437)
4. Funded percentage (2. ÷ 1.)	1360%	1279%
5. Combined valuation payroll	\$38,133	\$33,825
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(284%)	(276%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$108,337)	(\$7,841)
Total				(\$108,337)	(\$7,841)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$7,927
b. Normal cost at December 31, 2012	664
c. Benefit payments during 2013	(669)
d. Interest at 7.75% to December 31, 2013	640
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	8,562
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	8,562
2. Actuarial accrued liability at December 31, 2013	8,598
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(36)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	101,364
b. Contributions for 2013 ¹	199
c. Benefit payments and expenses during 2013	(675)
d. Interest at 7.75% to December 31, 2013	7,837
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	108,726
5. Actuarial value of assets at December 31, 2013	116,935
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	8,210
7. Total actuarial gain/(loss) (3. + 6.)	\$8,174

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$93,437)
2. Expected increase	(6,726)
3. Liability (gain)/loss	36
4. Asset (gain)/loss	(8,210)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$108,337)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	714	4,678	15.26%	664	4,368	15.20%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$714	\$4,678	15.26%	\$664	\$4,368	15.20%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$108,337)	(\$93,437)
2. Next year's Tier 1/Tier 2 UAL payment	(7,841)	(6,763)
3. Combined valuation payroll	38,133	33,825
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(20.56%)	(19.99%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.26%	15.20%
b. Tier 1/Tier 2 UAL rate	(20.56%)	(19.99%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	(5.15%)	(4.66%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	5.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	5.41%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.08%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	1360%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	6.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	0.00%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	11.41%
7. July 1, 2015 total pension rate, before adjustment	(5.15%)
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	5.15%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(20.56%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(15.41%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	0.00%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	5.47%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	15.26%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	20.73%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	5.47%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	20.73%	20.64%
b. Tier 1/Tier 2 UAL rate	(15.41%)	(15.33%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	5.47%	5.44%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$4,678	\$0	\$4,678
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	4,678	0	4,678
OPSRP valuation payroll	33,455	0	33,455
Combined valuation payroll	\$38,133	\$0	\$38,133

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	2	2	0	0	2	2
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	2	2	0	0	2	2
Active Members with previous service segments with the employer								
General Service	1	0	N/A	1	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	1	0	N/A	1	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	1	0	0	1	1	0	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	0	1	1	0	0	1
Grand Total Number of Members	2	0	2	4	1	0	2	3

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	0	0	0	0	0	0	0	0

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59			80-84	1	51
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total	1	51

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.



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

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

September 2014

Vernonia Fire/2797
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Vernonia Fire/2797

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
Vernonia Fire/2797

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

INDEPENDENT EMPLOYERS

Vernonia Fire -- #2797

September 2014

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Executive Summary

Milliman has prepared this report for Vernonia Fire to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Vernonia Fire.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Vernonia Fire

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	9.70%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(4.23%)	(4.23%)	(4.23%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	6.08%	3.71%	7.82%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	6.61%	4.16%	8.27%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 123%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	5.47%	5.47%
Minimum July 1, 2017 Rate	2.47%	0.00%
Maximum July 1, 2017 Rate	8.47%	11.47%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$181,217	\$160,109	(\$21,108)	113%	\$13,898	(152%)
12/31/2009	216,962	163,620	(53,342)	133%	68,210	(78%)
12/31/2010	237,730	179,180	(58,550)	133%	63,952	(92%)
12/31/2011	202,377	193,402	(8,975)	105%	95,536	(9%)
12/31/2012	222,028	192,073	(29,955)	116%	68,647	(44%)
12/31/2013	246,059	200,102	(45,957)	123%	76,009	(60%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Vernonia Fire

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$45,957)	(\$29,955)
Allocated pooled OPSRP UAL	5,374	4,838
Side account	0	0
Net unfunded pension actuarial accrued liability	(40,583)	(25,117)
Combined valuation payroll	76,009	68,647
Net pension UAL as a percentage of payroll	(53%)	(37%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,052	\$1,440

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$1,810	\$1,605
Tier 1/Tier 2 valuation payroll	19,792	17,475
Tier 1/Tier 2 pension normal cost rate	9.70%	9.18%
Tier 1/ Tier 2 Actuarial accrued liability	\$200,102	\$192,073
Actuarial asset value	246,059	222,028
Tier 1/Tier 2 Unfunded actuarial accrued liability	(45,957)	(29,955)
Tier 1/ Tier 2 Funded status	123%	116%
Combined valuation payroll	\$76,009	\$68,647
Tier 1/Tier 2 UAL as a percentage of payroll	(60%)	(44%)
Tier 1/Tier 2 UAL rate	(4.23%)	(3.03%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members ¹	1	1
Tier 1/Tier 2 dormant members	1	1
Tier 1/Tier 2 retirees and beneficiaries	1	1

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	76,009	68,647
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$15,726	\$14,394
2. Employer reserves	142,818	123,790
3. Benefits in force reserve	87,515	83,844
4. Total market value of assets (1. + 2. + 3.)	\$246,059	\$222,028

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$222,028
2. Regular employer contributions	(168)
3. Benefit payments and expense	(13,548)
4. Adjustments ²	5,446
5. Interest credited	32,300
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$246,059

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	1,810	1,605
Total	\$1,810	\$1,605

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$1,810	\$1,810	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	25,894	20,009
▪ Total Active Members	\$25,894	\$20,009
Dormant Members	33,137	30,775
Retired Members and Beneficiaries	141,071	141,289
Total Actuarial Accrued Liability	\$200,102	\$192,073

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$200,102	\$200,102	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$200,102	\$192,073
2. Actuarial value of assets	246,059	222,028
3. Unfunded accrued liability (1. – 2.)	(45,957)	(29,955)
4. Funded percentage (2. ÷ 1.)	123%	116%
5. Combined valuation payroll	\$76,009	\$68,647
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(60%)	(44%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$45,957)	(\$3,326)
Total				(\$45,957)	(\$3,326)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$192,073
b. Normal cost at December 31, 2012	1,605
c. Benefit payments during 2013	(13,440)
d. Interest at 7.75% to December 31, 2013	14,489
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	194,727
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	194,727
2. Actuarial accrued liability at December 31, 2013	200,102
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(5,375)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	222,028
b. Contributions for 2013 ¹	(168)
c. Benefit payments and expenses during 2013	(13,548)
d. Interest at 7.75% to December 31, 2013	16,676
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	224,989
5. Actuarial value of assets at December 31, 2013	246,059
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	21,070
7. Total actuarial gain/(loss) (3. + 6.)	\$15,695

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$29,955)
2. Expected increase	(307)
3. Liability (gain)/loss	5,375
4. Asset (gain)/loss	(21,070)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$45,957)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	1,810	19,792	9.15%	1,605	17,475	9.18%
Total	\$1,810	\$19,792	9.15%	\$1,605	\$17,475	9.18%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$45,957)	(\$29,955)
2. Next year's Tier 1/Tier 2 UAL payment	(3,326)	(2,168)
3. Combined valuation payroll	76,009	68,647
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(4.38%)	(3.16%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	9.15%	9.18%
b. Tier 1/Tier 2 UAL rate	(4.38%)	(3.16%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	4.92%	6.15%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	5.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	5.41%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.08%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	123%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	2.41%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	8.41%
7. July 1, 2015 total pension rate, before adjustment	4.92%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(4.38%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(4.38%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	4.92%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.55%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	9.15%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	9.70%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	5.47%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	9.70%	9.18%
b. Tier 1/Tier 2 UAL rate	(4.38%)	(3.16%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	5.47%	6.15%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	19,792	0	19,792
Tier 1/Tier 2 valuation payroll	19,792	0	19,792
OPSRP valuation payroll	0	56,217	56,217
Combined valuation payroll	\$19,792	\$56,217	\$76,009

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	1	0	1	0	1	0	1
Police & Fire	0	0	1	1	0	0	1	1
Total	0	1	1	2	0	1	1	2
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	1	0	0	1	1	0	0	1
Total	1	0	0	1	1	0	0	1
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	1	0	1	0	1	0	1
Total	0	1	0	1	0	1	0	1
Grand Total Number of Members	1	2	1	4	1	2	1	4

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44			1							1
45-49										
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	1	0	0	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59	1	936
35-39			60-64		
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59	1	207	80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	1	207	Total	1	936

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.



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

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

September 2014

Wallowa County/2050
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Wallowa County/2050

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
Wallowa County/2050

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

INDEPENDENT EMPLOYERS

Wallowa County -- #2050

September 2014

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Executive Summary

Milliman has prepared this report for Wallowa County to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Wallowa County.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Wallowa County

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	13.74%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(7.22%)	(7.22%)	(7.22%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	7.13%	0.72%	4.83%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	7.66%	1.17%	5.28%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 123%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	6.52%	6.52%
Minimum July 1, 2017 Rate	3.52%	0.52%
Maximum July 1, 2017 Rate	9.52%	12.52%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$956,442	\$1,052,688	\$96,246	91%	\$301,113	32%
12/31/2009	1,085,009	1,054,205	(30,804)	103%	280,934	(11%)
12/31/2010	1,148,797	1,222,151	73,354	94%	299,382	25%
12/31/2011	1,158,734	1,294,432	135,698	90%	283,239	48%
12/31/2012	1,302,300	1,090,558	(211,742)	119%	178,369	(119%)
12/31/2013	1,434,706	1,162,654	(272,052)	123%	267,075	(102%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Wallowa County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$272,052)	(\$211,742)
Allocated pooled OPSRP UAL	18,884	12,572
Side account	0	0
Net unfunded pension actuarial accrued liability	(253,168)	(199,170)
Combined valuation payroll	267,075	178,369
Net pension UAL as a percentage of payroll	(95%)	(112%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$3,697	\$3,742

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$13,688	\$12,359
Tier 1/Tier 2 valuation payroll	99,592	78,892
Tier 1/Tier 2 pension normal cost rate	13.74%	15.67%
Tier 1/ Tier 2 Actuarial accrued liability	\$1,162,654	\$1,090,558
Actuarial asset value	1,434,706	1,302,300
Tier 1/Tier 2 Unfunded actuarial accrued liability	(272,052)	(211,742)
Tier 1/ Tier 2 Funded status	123%	119%
Combined valuation payroll	\$267,075	\$178,369
Tier 1/Tier 2 UAL as a percentage of payroll	(102%)	(119%)
Tier 1/Tier 2 UAL rate	(7.22%)	(8.46%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members ¹	1	1
Tier 1/Tier 2 dormant members	3	4
Tier 1/Tier 2 retirees and beneficiaries	9	8

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	267,075	178,369
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$113,788	\$140,231
2. Employer reserves	909,357	822,701
3. Benefits in force reserve	411,561	339,367
4. Total market value of assets (1. + 2. + 3.)	\$1,434,706	\$1,302,300

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$1,302,300
2. Regular employer contributions	6,077
3. Benefit payments and expense	(63,711)
4. Adjustments ²	1,134
5. Interest credited	188,906
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$1,434,706

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	13,688	12,359
Tier 2 General Service	0	0
Total	\$13,688	\$12,359

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$13,688	\$13,688	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$998
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	215,944	176,142
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$215,944	\$177,140
Dormant Members	283,288	341,538
Retired Members and Beneficiaries	663,422	571,880
Total Actuarial Accrued Liability	\$1,162,654	\$1,090,558

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$1,162,654	\$1,162,654	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$1,162,654	\$1,090,558
2. Actuarial value of assets	1,434,706	1,302,300
3. Unfunded accrued liability (1. – 2.)	(272,052)	(211,742)
4. Funded percentage (2. ÷ 1.)	123%	119%
5. Combined valuation payroll	\$267,075	\$178,369
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(102%)	(119%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$272,052)	(\$19,691)
Total				(\$272,052)	(\$19,691)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$1,090,558
b. Normal cost at December 31, 2012	12,359
c. Benefit payments during 2013	(63,206)
d. Interest at 7.75% to December 31, 2013	83,027
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	1,122,738
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	1,122,738
2. Actuarial accrued liability at December 31, 2013	1,162,654
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(39,916)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,302,300
b. Contributions for 2013 ¹	6,077
c. Benefit payments and expenses during 2013	(63,711)
d. Interest at 7.75% to December 31, 2013	98,695
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	1,343,361
5. Actuarial value of assets at December 31, 2013	1,434,706
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	91,346
7. Total actuarial gain/(loss) (3. + 6.)	\$51,430

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$211,742)
2. Expected increase	(8,880)
3. Liability (gain)/loss	39,916
4. Asset (gain)/loss	(91,346)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$272,052)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	13,688	99,592	13.74%	12,359	78,892	15.67%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$13,688	\$99,592	13.74%	\$12,359	\$78,892	15.67%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$272,052)	(\$211,742)
2. Next year's Tier 1/Tier 2 UAL payment	(19,691)	(15,326)
3. Combined valuation payroll	267,075	178,369
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(7.37%)	(8.59%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.74%	15.67%
b. Tier 1/Tier 2 UAL rate	(7.37%)	(8.59%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	6.52%	7.21%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	8.48%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	8.48%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.70%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	123%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	5.48%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	11.48%
7. July 1, 2015 total pension rate, before adjustment	6.52%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(7.37%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(7.37%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	6.52%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	13.74%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	13.74%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	6.52%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.74%	15.67%
b. Tier 1/Tier 2 UAL rate	(7.37%)	(8.59%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	6.52%	7.21%
<i>(a. + b. + c., minimum of 5.47%)</i>		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	0	99,592	99,592
Tier 1/Tier 2 valuation payroll	0	99,592	99,592
OPSRP valuation payroll	0	167,483	167,483
Combined valuation payroll	\$0	\$267,075	\$267,075

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	1	3	4	0	1	2	3
Total	0	1	3	4	0	1	2	3
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	1	0	N/A	1
Total	0	0	N/A	0	1	0	N/A	1
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	2	1	0	3	3	1	0	4
Total	2	1	0	3	3	1	0	4
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	8	1	0	9	7	1	0	8
Total	8	1	0	9	7	1	0	8
Grand Total Number of Members	10	3	3	16	11	3	2	16

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49			1							1
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	1	0	0	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59	2	776
35-39			60-64	1	622
40-44	1	1,485	65-69	1	857
45-49	2	1,089	70-74	1	616
50-54			75-79	2	292
55-59			80-84	2	175
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total	3	1,221	Total	9	509

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.



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

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

September 2014

West Side Rural Fire Protection District/2796
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
West Side Rural Fire Protection District/2796

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
West Side Rural Fire Protection District/2796

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

INDEPENDENT EMPLOYERS

West Side Rural Fire Protection District -- #2796

September 2014

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Executive Summary

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

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to West Side Rural Fire Protection District.

Employer Contribution Rates

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

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

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	21.43%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(6.67%)	(6.67%)	(6.67%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	15.37%	1.27%	5.38%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	15.90%	1.72%	5.83%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 132%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	14.76%	14.76%
Minimum July 1, 2017 Rate	11.76%	8.76%
Maximum July 1, 2017 Rate	17.76%	20.76%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$139,545	\$124,659	(\$14,886)	112%	\$72,702	(20%)
12/31/2009	180,273	148,854	(31,419)	121%	76,630	(41%)
12/31/2010	214,440	171,459	(42,981)	125%	79,841	(54%)
12/31/2011	231,035	197,980	(33,055)	117%	82,111	(40%)
12/31/2012	278,239	226,802	(51,437)	123%	84,601	(61%)
12/31/2013	335,523	253,385	(82,138)	132%	87,178	(94%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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	General Service	Police & Fire
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

West Side Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$82,138)	(\$51,437)
Allocated pooled OPSRP UAL	6,164	5,963
Side account	0	0
Net unfunded pension actuarial accrued liability	(75,974)	(45,474)
Combined valuation payroll	87,178	84,601
Net pension UAL as a percentage of payroll	(87%)	(54%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,207	\$1,775

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$18,681	\$17,958
Tier 1/Tier 2 valuation payroll	87,178	84,601
Tier 1/Tier 2 pension normal cost rate	21.43%	21.23%
Tier 1/ Tier 2 Actuarial accrued liability	\$253,385	\$226,802
Actuarial asset value	335,523	278,239
Tier 1/Tier 2 Unfunded actuarial accrued liability	(82,138)	(51,437)
Tier 1/ Tier 2 Funded status	132%	123%
Combined valuation payroll	\$87,178	\$84,601
Tier 1/Tier 2 UAL as a percentage of payroll	(94%)	(61%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(6.67%)	(4.69%)
Tier 1/Tier 2 active members ¹	1	1
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	0	0

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	87,178	84,601
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$27,168	\$23,365
2. Employer reserves	308,355	254,874
3. Benefits in force reserve	0	0
4. Total market value of assets (1. + 2. + 3.)	\$335,523	\$278,239

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$278,239
2. Regular employer contributions	11,955
3. Benefit payments and expense	0
4. Adjustments ²	86
5. Interest credited	45,243
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$335,523

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	18,681	17,958
Tier 2 General Service	0	0
Total	\$18,681	\$17,958

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$18,681	\$18,681	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	253,385	226,802
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$253,385	\$226,802
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	\$253,385	\$226,802

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$253,385	\$253,385	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$253,385	\$226,802
2. Actuarial value of assets	335,523	278,239
3. Unfunded accrued liability (1. – 2.)	(82,138)	(51,437)
4. Funded percentage (2. ÷ 1.)	132%	123%
5. Combined valuation payroll	\$87,178	\$84,601
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(94%)	(61%)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$82,138)	(\$5,945)
Total				(\$82,138)	(\$5,945)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$226,802
b. Normal cost at December 31, 2012	17,958
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	18,969
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	263,729
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	263,729
2. Actuarial accrued liability at December 31, 2013	253,385
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	10,344
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	278,239
b. Contributions for 2013 ¹	11,955
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	22,027
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	312,220
5. Actuarial value of assets at December 31, 2013	335,523
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	23,303
7. Total actuarial gain/(loss) (3. + 6.)	\$33,647

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	(\$51,437)
2. Expected increase	2,946
3. Liability (gain)/loss	(10,344)
4. Asset (gain)/loss	(23,303)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$82,138)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	18,681	87,178	21.43%	17,958	84,601	21.23%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$18,681	\$87,178	21.43%	\$17,958	\$84,601	21.23%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$82,138)	(\$51,437)
2. Next year's Tier 1/Tier 2 UAL payment	(5,945)	(3,723)
3. Combined valuation payroll	87,178	84,601
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(6.82%)	(4.40%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	21.43%	21.23%
b. Tier 1/Tier 2 UAL rate	(6.82%)	(4.40%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	14.76%	16.96%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	13.54%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	13.54%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	2.71%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	132%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.60%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	9.94%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	17.14%
7. July 1, 2015 total pension rate, before adjustment	14.76%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(6.82%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(6.82%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	14.76%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	21.43%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	21.43%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	14.76%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	21.43%	21.23%
b. Tier 1/Tier 2 UAL rate	(6.82%)	(4.82%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	14.76%	16.54%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	0	87,178	87,178
Tier 1/Tier 2 valuation payroll	0	87,178	87,178
OPSRP valuation payroll	0	0	0
Combined valuation payroll	\$0	\$87,178	\$87,178

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	1	0	1	0	1	0	1
Total	0	1	0	1	0	1	0	1
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Grand Total Number of Members	0	1	0	1	0	1	0	1

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59										
60-64			1							1
65-69										
70-74										
75+										
Total	0	0	1	0	0	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total		

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.



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

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

September 2014

West Valley Fire District/2725
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
West Valley Fire District/2725

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
West Valley Fire District/2725

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

INDEPENDENT EMPLOYERS

West Valley Fire District -- #2725

September 2014

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Executive Summary

Milliman has prepared this report for West Valley Fire District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to West Valley Fire District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for West Valley Fire District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	14.25%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(0.29%)	(0.29%)	(0.29%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	14.57%	7.65%	11.76%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	15.10%	8.10%	12.21%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 104%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	13.96%	13.96%
Minimum July 1, 2017 Rate	10.96%	7.96%
Maximum July 1, 2017 Rate	16.96%	19.96%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$374,665	\$523,601	\$148,936	72%	\$282,551	53%
12/31/2009	467,780	426,605	(41,175)	110%	287,520	(14%)
12/31/2010	556,619	497,630	(58,989)	112%	490,715	(12%)
12/31/2011	596,571	590,253	(6,318)	101%	457,183	(1%)
12/31/2012	699,866	728,108	28,242	96%	368,253	8%
12/31/2013	813,970	782,700	(31,270)	104%	509,464	(6%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

West Valley Fire District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$31,270)	\$28,242
Allocated pooled OPSRP UAL	36,022	25,955
Side account	0	0
Net unfunded pension actuarial accrued liability	4,752	54,197
Combined valuation payroll	509,464	368,253
Net pension UAL as a percentage of payroll	1%	15%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$7,052	\$7,726

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$15,373	\$12,276
Tier 1/Tier 2 valuation payroll	107,887	85,353
Tier 1/Tier 2 pension normal cost rate	14.25%	14.38%
Tier 1/ Tier 2 Actuarial accrued liability	\$782,700	\$728,108
Actuarial asset value	813,970	699,866
Tier 1/Tier 2 Unfunded actuarial accrued liability	(31,270)	28,242
Tier 1/ Tier 2 Funded status	104%	96%
Combined valuation payroll	\$509,464	\$368,253
Tier 1/Tier 2 UAL as a percentage of payroll	(6%)	8%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(0.29%)	0.69%
Tier 1/Tier 2 active members ¹	2	1
Tier 1/Tier 2 dormant members	5	5
Tier 1/Tier 2 retirees and beneficiaries	5	5

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	509,464	368,253
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$87,118	\$76,329
2. Employer reserves	712,592	609,918
3. Benefits in force reserve	14,260	13,619
4. Total market value of assets (1. + 2. + 3.)	\$813,970	\$699,866

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$699,866
2. Regular employer contributions	7,001
3. Benefit payments and expense	(2,207)
4. Adjustments ²	912
5. Interest credited	108,399
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$813,970

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$13,524	\$12,276
Tier 1 General Service	0	0
Tier 2 Police & Fire	1,849	0
Tier 2 General Service	0	0
Total	\$15,373	\$12,276

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$15,373	\$15,373	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$258,378	\$203,162
▪ Tier 1 General Service	35,344	32,270
▪ Tier 2 Police & Fire	225,773	227,413
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$519,495	\$462,845
Dormant Members	240,219	242,313
Retired Members and Beneficiaries	22,986	22,950
Total Actuarial Accrued Liability	\$782,700	\$728,108

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$782,700	\$782,700	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$782,700	\$728,108
2. Actuarial value of assets	813,970	699,866
3. Unfunded accrued liability (1. – 2.)	(31,270)	28,242
4. Funded percentage (2. ÷ 1.)	104%	96%
5. Combined valuation payroll	\$509,464	\$368,253
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(6%)	8%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$31,270)	(\$2,263)
Total				(\$31,270)	(\$2,263)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$728,108
b. Normal cost at December 31, 2012	12,276
c. Benefit payments during 2013	(2,190)
d. Interest at 7.75% to December 31, 2013	57,295
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	795,489
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	795,489
2. Actuarial accrued liability at December 31, 2013	782,700
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	12,789
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	699,866
b. Contributions for 2013 ¹	7,001
c. Benefit payments and expenses during 2013	(2,207)
d. Interest at 7.75% to December 31, 2013	54,425
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	759,085
5. Actuarial value of assets at December 31, 2013	813,970
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	54,885
7. Total actuarial gain/(loss) (3. + 6.)	\$67,674

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$28,242
2. Expected increase	8,162
3. Liability (gain)/loss	(12,789)
4. Asset (gain)/loss	(54,885)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$31,270)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$13,524	\$94,797	14.27%	\$12,276	\$85,353	14.38%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	1,849	13,090	14.13%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$15,373	\$107,887	14.25%	\$12,276	\$85,353	14.38%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$31,270)	\$28,242
2. Next year's Tier 1/Tier 2 UAL payment	(2,263)	2,044
3. Combined valuation payroll	509,464	368,253
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(0.44%)	0.56%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.25%	14.38%
b. Tier 1/Tier 2 UAL rate	(0.44%)	0.56%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	13.96%	15.07%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	12.12%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	12.12%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	2.42%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	104%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	9.12%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	15.12%
7. July 1, 2015 total pension rate, before adjustment	13.96%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(0.44%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(0.44%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.96%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	14.25%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	14.25%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	13.96%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.25%	14.38%
b. Tier 1/Tier 2 UAL rate	(0.44%)	0.56%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	13.96%	15.07%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$94,797	\$94,797
Tier 2	0	13,090	13,090
Tier 1/Tier 2 valuation payroll	0	107,887	107,887
OPSRP valuation payroll	22,236	379,341	401,577
Combined valuation payroll	\$22,236	\$487,228	\$509,464

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	1	1	0	0	0	0
Police & Fire	1	1	6	8	1	0	6	7
Total	1	1	7	9	1	0	6	7
Active Members with previous service segments with the employer								
General Service	1	0	N/A	1	1	0	N/A	1
Police & Fire	2	10	N/A	12	2	1	N/A	3
Total	3	10	N/A	13	3	1	N/A	4
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	4	1	1	6	4	1	1	6
Total	4	1	1	6	4	1	1	6
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	5	0	0	5	5	0	0	5
Total	5	0	0	5	5	0	0	5
Grand Total Number of Members	13	12	8	33	13	2	7	22

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44		1								1
45-49										
50-54						1				1
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	1	0	0	0	1	0	0	0	2

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45	1	15
20-24			45-49	1	19
25-29			50-54		
30-34			55-59	1	58
35-39			60-64		
40-44	2	13	65-69		
45-49			70-74	1	22
50-54	1	0	75-79	1	53
55-59	1	1,473	80-84		
60-64			85-89		
65-69			90-94		
70-74	1	425	95-99		
75+			100+		
Total	5	385	Total	5	33

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.



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

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

September 2014

Weston Cemetery/2686
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Weston Cemetery/2686

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
Weston Cemetery/2686

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

INDEPENDENT EMPLOYERS

Weston Cemetery -- #2686

September 2014

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Executive Summary

Milliman has prepared this report for Weston Cemetery to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Weston Cemetery.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Weston Cemetery

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	19.91%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(8.20%)	(8.20%)	(8.20%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	12.32%	0.00%	3.85%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	12.85%	0.45%	4.30%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 103%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	11.71%	11.71%
Minimum July 1, 2017 Rate	8.71%	5.71%
Maximum July 1, 2017 Rate	14.71%	17.71%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$85,842	\$99,205	\$13,363	87%	\$20,406	65%
12/31/2009	95,306	108,235	12,929	88%	18,996	68%
12/31/2010	99,997	118,986	18,989	84%	23,703	80%
12/31/2011	94,356	120,406	26,050	78%	3,845	678%
12/31/2012	103,907	122,524	18,617	85%	9,681	192%
12/31/2013	112,555	109,317	(3,238)	103%	27,143	(12%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Weston Cemetery

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$3,238)	\$18,617
Allocated pooled OPSRP UAL	1,919	682
Side account	0	0
Net unfunded pension actuarial accrued liability	(1,319)	19,299
Combined valuation payroll	27,143	9,681
Net pension UAL as a percentage of payroll	(5%)	199%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$376	\$203

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$5,405	\$3,557
Tier 1/Tier 2 valuation payroll	27,143	9,681
Tier 1/Tier 2 pension normal cost rate	19.91%	36.74%
Tier 1/ Tier 2 Actuarial accrued liability	\$109,317	\$122,524
Actuarial asset value	112,555	103,907
Tier 1/Tier 2 Unfunded actuarial accrued liability	(3,238)	18,617
Tier 1/ Tier 2 Funded status	103%	85%
Combined valuation payroll	\$27,143	\$9,681
Tier 1/Tier 2 UAL as a percentage of payroll	(12%)	192%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(8.20%)	(25.03%)
Tier 1/Tier 2 active members ¹	2	1
Tier 1/Tier 2 dormant members	0	1
Tier 1/Tier 2 retirees and beneficiaries	2	2

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	27,143	9,681
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$0	\$2,826
2. Employer reserves	55,230	45,544
3. Benefits in force reserve	57,325	55,536
4. Total market value of assets (1. + 2. + 3.)	\$112,555	\$103,907

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$103,907
2. Regular employer contributions	2,259
3. Benefit payments and expense	(8,874)
4. Adjustments ²	87
5. Interest credited	15,177
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$112,555

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	5,405	3,557
Total	\$5,405	\$3,557

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$5,405	\$5,405	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	16,911	11,163
▪ Total Active Members	\$16,911	\$11,163
Dormant Members	0	17,774
Retired Members and Beneficiaries	92,406	93,587
Total Actuarial Accrued Liability	\$109,317	\$122,524

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$109,317	\$109,317	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$109,317	\$122,524
2. Actuarial value of assets	112,555	103,907
3. Unfunded accrued liability (1. – 2.)	(3,238)	18,617
4. Funded percentage (2. ÷ 1.)	103%	85%
5. Combined valuation payroll	\$27,143	\$9,681
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	(12%)	192%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$3,238)	(\$234)
Total				(\$3,238)	(\$234)

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$122,524
b. Normal cost at December 31, 2012	3,557
c. Benefit payments during 2013	(8,804)
d. Interest at 7.75% to December 31, 2013	9,430
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	126,707
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	126,707
2. Actuarial accrued liability at December 31, 2013	109,317
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	17,390
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	103,907
b. Contributions for 2013 ¹	2,259
c. Benefit payments and expenses during 2013	(8,874)
d. Interest at 7.75% to December 31, 2013	7,796
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	105,088
5. Actuarial value of assets at December 31, 2013	112,555
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	7,468
7. Total actuarial gain/(loss) (3. + 6.)	\$24,858

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$18,617
2. Expected increase	3,003
3. Liability (gain)/loss	(17,390)
4. Asset (gain)/loss	(7,468)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$3,238)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	5,405	27,143	19.91%	3,557	9,681	36.74%
Total	\$5,405	\$27,143	19.91%	\$3,557	\$9,681	36.74%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$3,238)	\$18,617
2. Next year's Tier 1/Tier 2 UAL payment	(234)	1,347
3. Combined valuation payroll	27,143	9,681
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	(0.86%)	13.91%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	19.91%	36.74%
b. Tier 1/Tier 2 UAL rate	(0.86%)	13.91%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	19.20%	50.78%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	8.71%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	8.71%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.74%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	103%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	5.71%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	11.71%
7. July 1, 2015 total pension rate, before adjustment	19.20%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(7.49%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(0.86%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(8.35%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.71%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	19.91%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	19.91%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	11.71%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	19.91%	36.74%
b. Tier 1/Tier 2 UAL rate	(8.35%)	(25.16%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	11.71%	11.71%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	27,143	0	27,143
Tier 1/Tier 2 valuation payroll	27,143	0	27,143
OPSRP valuation payroll	0	0	0
Combined valuation payroll	\$27,143	\$0	\$27,143

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	2	0	2	0	1	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	1	0	1
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	1	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	1	N/A	1
Dormant Members								
General Service	0	0	0	0	0	1	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1
Retired Members and Beneficiaries								
General Service	2	0	0	2	2	0	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	2	0	0	2	2	0	0	2
Grand Total Number of Members	2	2	0	4	2	3	0	5

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59			2							2
60-64										
65-69										
70-74										
75+										
Total	0	0	2	0	0	0	0	0	0	2

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64	1	148
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59			80-84	1	771
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total	2	460

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.



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

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

September 2014

Winchester Bay Sanitary District/2714
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Winchester Bay Sanitary District/2714

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
Winchester Bay Sanitary District/2714

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

INDEPENDENT EMPLOYERS

Winchester Bay Sanitary District -- #2714

September 2014

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Executive Summary

Milliman has prepared this report for Winchester Bay Sanitary District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Winchester Bay Sanitary District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Winchester Bay Sanitary District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	Police & Fire
Pension			
Normal cost rate	11.89%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	2.02%	2.02%	2.02%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	14.52%	9.96%	14.07%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	15.05%	10.41%	14.52%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 87%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	13.91%	13.91%
Minimum July 1, 2017 Rate	10.91%	7.91%
Maximum July 1, 2017 Rate	16.91%	19.91%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$129,283	\$199,044	\$69,761	65%	\$99,241	70%
12/31/2009	151,074	216,670	65,596	70%	138,874	47%
12/31/2010	168,693	228,660	59,967	74%	139,258	43%
12/31/2011	170,661	234,713	64,052	73%	138,822	46%
12/31/2012	204,010	269,846	65,836	76%	143,212	46%
12/31/2013	243,389	280,556	37,167	87%	144,040	26%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Winchester Bay Sanitary District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$37,167	\$65,836
Allocated pooled OPSRP UAL	10,185	10,094
Side account	0	0
Net unfunded pension actuarial accrued liability	47,352	75,930
Combined valuation payroll	144,040	143,212
Net pension UAL as a percentage of payroll	33%	53%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,994	\$3,005

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$12,175	\$12,171
Tier 1/Tier 2 valuation payroll	102,436	104,186
Tier 1/Tier 2 pension normal cost rate	11.89%	11.68%
Tier 1/ Tier 2 Actuarial accrued liability	\$280,556	\$269,846
Actuarial asset value	243,389	204,010
Tier 1/Tier 2 Unfunded actuarial accrued liability	37,167	65,836
Tier 1/ Tier 2 Funded status	87%	76%
Combined valuation payroll	\$144,040	\$143,212
Tier 1/Tier 2 UAL as a percentage of payroll	26%	46%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	2.02%	3.46%
Tier 1/Tier 2 active members ¹	2	2
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	3	3

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	144,040	143,212
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$19,446	\$16,724
2. Employer reserves	160,300	124,502
3. Benefits in force reserve	63,642	62,784
4. Total market value of assets (1. + 2. + 3.)	\$243,389	\$204,010

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$204,010
2. Regular employer contributions	14,287
3. Benefit payments and expense	(9,852)
4. Adjustments ²	2,122
5. Interest credited	32,822
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$243,389

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	12,175	12,171
Total	\$12,175	\$12,171

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$12,175	\$12,175	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	177,967	164,046
▪ Total Active Members	\$177,967	\$164,046
Dormant Members	0	0
Retired Members and Beneficiaries	102,589	105,800
Total Actuarial Accrued Liability	\$280,556	\$269,846

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$280,556	\$280,556	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$280,556	\$269,846
2. Actuarial value of assets	243,389	204,010
3. Unfunded accrued liability (1. – 2.)	37,167	65,836
4. Funded percentage (2. ÷ 1.)	87%	76%
5. Combined valuation payroll	\$144,040	\$143,212
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	26%	46%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$37,167	\$2,690
Total				\$37,167	\$2,690

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$269,846
b. Normal cost at December 31, 2012	12,171
c. Benefit payments during 2013	(9,774)
d. Interest at 7.75% to December 31, 2013	21,478
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	293,721
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	293,721
2. Actuarial accrued liability at December 31, 2013	280,556
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	13,165
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	204,010
b. Contributions for 2013 ¹	14,287
c. Benefit payments and expenses during 2013	(9,852)
d. Interest at 7.75% to December 31, 2013	15,983
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	224,427
5. Actuarial value of assets at December 31, 2013	243,389
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	18,961
7. Total actuarial gain/(loss) (3. + 6.)	\$32,126

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$65,836
2. Expected increase	3,457
3. Liability (gain)/loss	(13,165)
4. Asset (gain)/loss	(18,961)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$37,167

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	12,175	102,436	11.89%	12,171	104,186	11.68%
Total	\$12,175	\$102,436	11.89%	\$12,171	\$104,186	11.68%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$37,167	\$65,836
2. Next year's Tier 1/Tier 2 UAL payment	2,690	4,765
3. Combined valuation payroll	144,040	143,212
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	1.87%	3.33%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	11.89%	11.68%
b. Tier 1/Tier 2 UAL rate	1.87%	3.33%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	13.91%	15.14%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	13.78%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	13.78%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	2.76%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	87%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	10.78%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	16.78%
7. July 1, 2015 total pension rate, before adjustment	13.91%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	1.87%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	1.87%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.91%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	11.89%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	11.89%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	13.91%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	11.89%	11.68%
b. Tier 1/Tier 2 UAL rate	1.87%	3.33%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	13.91%	15.14%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	102,436	0	102,436
Tier 1/Tier 2 valuation payroll	102,436	0	102,436
OPSRP valuation payroll	41,604	0	41,604
Combined valuation payroll	\$144,040	\$0	\$144,040

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	2	1	3	0	2	1	3
Police & Fire	0	0	0	0	0	0	0	0
Total	0	2	1	3	0	2	1	3
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	3	0	0	3	3	0	0	3
Police & Fire	0	0	0	0	0	0	0	0
Total	3	0	0	3	3	0	0	3
Grand Total Number of Members	3	2	1	6	3	2	1	6

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54				1						1
55-59			1							1
60-64										
65-69										
70-74										
75+										
Total	0	0	1	1	0	0	0	0	0	2

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69	1	307
45-49			70-74		
50-54			75-79		
55-59			80-84	2	479
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total	3	421

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.



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

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

September 2014

Yamhill County/2015
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Yamhill County/2015

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
Yamhill County/2015

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

INDEPENDENT EMPLOYERS

Yamhill County -- #2015

September 2014

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

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Executive Summary

Milliman has prepared this report for Yamhill County to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Yamhill County.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Yamhill County

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	12.91%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	(1.20%)	(1.20%)	(1.20%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	12.32%	6.74%	10.85%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	12.85%	7.19%	11.30%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 99%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	11.71%	11.71%
Minimum July 1, 2017 Rate	8.71%	5.71%
Maximum July 1, 2017 Rate	14.71%	17.71%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$39,730,256	\$42,184,835	\$2,454,579	94%	\$20,819,666	12%
12/31/2009	46,262,877	45,990,333	(272,544)	101%	21,770,669	(1%)
12/31/2010	50,594,864	50,082,170	(512,694)	101%	22,476,974	(2%)
12/31/2011	49,368,116	53,073,411	3,705,295	93%	21,695,391	17%
12/31/2012	55,280,975	58,352,215	3,071,240	95%	21,979,926	14%
12/31/2013	61,606,382	62,439,555	833,172	99%	22,587,423	4%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Yamhill County

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	\$833,172	\$3,071,240
Allocated pooled OPSRP UAL	1,597,068	1,549,206
Side account	0	0
Net unfunded pension actuarial accrued liability	2,430,240	4,620,446
Combined valuation payroll	22,587,423	21,979,926
Net pension UAL as a percentage of payroll	11%	21%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$312,634	\$461,148

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$1,540,362	\$1,583,581
Tier 1/Tier 2 valuation payroll	11,931,610	12,172,009
Tier 1/Tier 2 pension normal cost rate	12.91%	13.01%
Tier 1/ Tier 2 Actuarial accrued liability	\$62,439,555	\$58,352,215
Actuarial asset value	61,606,383	55,280,975
Tier 1/Tier 2 Unfunded actuarial accrued liability	833,172	3,071,240
Tier 1/ Tier 2 Funded status	99%	95%
Combined valuation payroll	\$22,587,423	\$21,979,926
Tier 1/Tier 2 UAL as a percentage of payroll	4%	14%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(1.20%)	(1.30%)
Tier 1/Tier 2 active members ¹	193	204
Tier 1/Tier 2 dormant members	106	106
Tier 1/Tier 2 retirees and beneficiaries	182	166

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	22,587,423	21,979,926
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$8,114,311	\$7,652,215
2. Employer reserves	38,595,108	34,752,379
3. Benefits in force reserve	14,896,964	12,876,381
4. Total market value of assets (1. + 2. + 3.)	\$61,606,383	\$55,280,975

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$55,280,975
2. Regular employer contributions	701,499
3. Benefit payments and expense	(2,306,112)
4. Adjustments ²	(462,056)
5. Interest credited	8,392,077
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$61,606,383

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$243,639	\$263,485
Tier 1 General Service	106,496	132,414
Tier 2 Police & Fire	289,678	276,871
Tier 2 General Service	900,549	910,811
Total	\$1,540,362	\$1,583,581

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$1,540,362	\$1,540,362	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$8,096,696	\$8,275,784
▪ Tier 1 General Service	2,171,405	2,401,482
▪ Tier 2 Police & Fire	5,089,731	4,548,118
▪ Tier 2 General Service	18,229,891	17,014,824
▪ Total Active Members	\$33,587,723	\$32,240,208
Dormant Members	4,838,450	4,413,526
Retired Members and Beneficiaries	24,013,382	21,698,481
Total Actuarial Accrued Liability	\$62,439,555	\$58,352,215

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$62,439,555	\$62,439,555	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$62,439,555	\$58,352,215
2. Actuarial value of assets	61,606,383	55,280,975
3. Unfunded accrued liability (1. – 2.)	833,172	3,071,240
4. Funded percentage (2. ÷ 1.)	99%	95%
5. Combined valuation payroll	\$22,587,423	\$21,979,926
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	4%	14%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	\$833,172	\$60,305
Total				\$833,172	\$60,305

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$58,352,215
b. Normal cost at December 31, 2012	1,583,581
c. Benefit payments during 2013	(2,287,821)
d. Interest at 7.75% to December 31, 2013	4,556,371
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	62,204,346
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	62,204,346
2. Actuarial accrued liability at December 31, 2013	62,439,555
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	(235,209)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	55,280,975
b. Contributions for 2013 ¹	701,499
c. Benefit payments and expenses during 2013	(2,306,112)
d. Interest at 7.75% to December 31, 2013	4,222,097
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	57,898,458
5. Actuarial value of assets at December 31, 2013	61,606,383
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	3,707,924
7. Total actuarial gain/(loss) (3. + 6.)	\$3,472,715

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$3,071,240
2. Expected increase	1,234,647
3. Liability (gain)/loss	235,209
4. Asset (gain)/loss	(3,707,924)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	\$833,172

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$243,639	\$1,348,179	18.07%	\$263,485	\$1,455,670	18.10%
Tier 1 General Service	106,496	710,261	14.99%	132,414	889,691	14.88%
Tier 2 Police & Fire	289,678	1,868,543	15.50%	276,871	1,764,028	15.70%
Tier 2 General Service	900,549	8,004,627	11.25%	910,811	8,062,620	11.30%
Total	\$1,540,362	\$11,931,610	12.91%	\$1,583,581	\$12,172,009	13.01%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	\$833,172	\$3,071,240
2. Next year's Tier 1/Tier 2 UAL payment	60,305	222,296
3. Combined valuation payroll	22,587,423	21,979,926
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	0.27%	1.01%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.91%	13.01%
b. Tier 1/Tier 2 UAL rate	0.27%	1.01%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	13.33%	14.15%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	8.71%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	8.71%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	1.74%
b. Preliminary size of rate collar (maximum of 3% or a.)	3.00%
c. Funded percentage	99%
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	3.00%
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	5.71%
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	11.71%
7. July 1, 2015 total pension rate, before adjustment	13.33%
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	(1.62%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.27%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	(1.35%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.71%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	12.91%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	12.91%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	11.71%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.91%	13.01%
b. Tier 1/Tier 2 UAL rate	(1.35%)	(1.43%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	11.71%	11.71%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$710,261	\$1,348,179	\$2,058,440
Tier 2	8,004,627	1,868,543	9,873,170
Tier 1/Tier 2 valuation payroll	8,714,888	3,216,722	11,931,610
OPSRP valuation payroll	8,317,978	2,337,835	10,655,813
Combined valuation payroll	\$17,032,866	\$5,554,557	\$22,587,423

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	14	138	205	357	16	146	181	343
Police & Fire	16	25	37	78	17	25	36	78
Total	30	163	242	435	33	171	217	421
Active Members with previous service segments with the employer								
General Service	20	57	N/A	77	16	29	N/A	45
Police & Fire	14	19	N/A	33	9	13	N/A	22
Total	34	76	N/A	110	25	42	N/A	67
Dormant Members								
General Service	16	72	12	100	16	73	9	98
Police & Fire	8	10	4	22	10	7	3	20
Total	24	82	16	122	26	80	12	118
Retired Members and Beneficiaries								
General Service	25	92	2	119	20	84	1	105
Police & Fire	62	3	0	65	57	5	0	62
Total	87	95	2	184	77	89	1	167
Grand Total Number of Members	175	416	260	851	161	382	230	773

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34		2	2							4
35-39		2	14	1						17
40-44		3	9	12	2					26
45-49		3	15	16	5	1				40
50-54		1	10	14	4	3	1			33
55-59		2	10	29	1					42
60-64			4	15			1			20
65-69		1	2	5						8
70-74				1						1
75+			1	1						2
Total	0	14	67	94	12	4	2	0	0	193

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45	1	127
20-24			45-49	6	423
25-29			50-54	6	1,985
30-34	4	540	55-59	16	1,322
35-39	7	624	60-64	36	934
40-44	16	581	65-69	57	1,112
45-49	8	434	70-74	36	579
50-54	22	737	75-79	20	484
55-59	23	380	80-84	2	895
60-64	20	523	85-89	2	2,148
65-69	6	385	90-94		
70-74			95-99		
75+			100+		
Total	106	538	Total	182	930

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.



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

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

September 2014

Yamhill Fire Protection District/2878
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 changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the OPSRP and Retiree Health Insurance Account (RHIA) 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:

- Side account balances, transactions and rate relief,
- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

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



September 2014
Yamhill Fire Protection District/2878

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
Yamhill Fire Protection District/2878

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

INDEPENDENT EMPLOYERS

Yamhill Fire Protection District -- #2878

September 2014

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Executive Summary

Milliman has prepared this report for Yamhill Fire Protection District to:

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

This report summarizes the valuation results for the OPSRP and RHIA. The full development of these results can be found in the December 31, 2013 system-wide valuation report. This report develops advisory employer-specific Tier 1/Tier 2 and side account rates and applies the results from the system-wide valuation to Yamhill Fire Protection District.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Yamhill Fire Protection District

	Payroll		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Pension			
Normal cost rate	14.24%	7.33%	11.44%
Tier 1/Tier 2 UAL rate ¹	0.15%	0.15%	0.15%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	15.00%	8.09%	12.20%
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	0.53%	0.45%	0.45%
Total net employer contribution rate	15.53%	8.54%	12.65%

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.

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, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer'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. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 100%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	14.39%	14.39%
Minimum July 1, 2017 Rate	11.39%	8.39%
Maximum July 1, 2017 Rate	17.39%	20.39%

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 updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

The Schedule of Funding Progress is required for the Tier 1/Tier 2 pension liabilities. The table below shows the schedule for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	\$0	\$0	\$0	0%	\$0	0%
12/31/2009	0	0	0	0%	0	0%
12/31/2010	0	0	0	0%	0	0%
12/31/2011	0	0	0	0%	0	0%
12/31/2012	0	0	0	0%	31,785	0%
12/31/2013	1	0	(1)	100%	74,622	0%

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was 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
July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
July 1, 2015 to June 30, 2017	0.53%	0.45%	0.45%

Executive Summary

Principal Valuation Results

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

Yamhill Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	(\$1)	\$0
Allocated pooled OPSRP UAL	5,276	2,240
Side account	0	0
Net unfunded pension actuarial accrued liability	5,275	2,240
Combined valuation payroll	74,622	31,785
Net pension UAL as a percentage of payroll	7%	7%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	\$1,033	\$667

UAL amounts for the pools (OPSRP and RHIA) are allocated pro-rata based on the ratio of an employer’s combined valuation payroll to that of the applicable pool. Pool total results are summarized on page 7 of this report. Allocated amounts shown above differ from the proportional share UAL that will be allocated to employers under the new GASB 68 accounting standard.

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	\$0	\$0
Tier 1/Tier 2 valuation payroll	0	0
Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
Tier 1/ Tier 2 Actuarial accrued liability	\$0	\$0
Actuarial asset value	1	0
Tier 1/Tier 2 Unfunded actuarial accrued liability	(1)	0
Tier 1/ Tier 2 Funded status	0%	0%
Combined valuation payroll	\$74,622	\$31,785
Tier 1/Tier 2 UAL as a percentage of payroll	0%	0%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	0.15%	0.13%
Tier 1/Tier 2 active members ¹	0	0
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	0	0

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

(\$ 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%

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 made 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	74,622	31,785
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.

Tier 1/Tier 2 Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Tier 1/Tier 2 Pension Assets

	December 31, 2013	December 31, 2012
1. Member reserves ¹	\$0	\$0
2. Employer reserves	1	0
3. Benefits in force reserve	0	0
4. Total market value of assets (1. + 2. + 3.)	\$1	\$0

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	\$0
2. Regular employer contributions	77
3. Benefit payments and expense	0
4. Adjustments ²	(88)
5. Interest credited	12
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$1

¹ For the December 31, 2012 valuation, reported member reserves were reduced to reflect the deficit status of the Tier 1 Rate Guarantee Reserve, as described in the system-wide report. The amount shown here is after this reduction.

² Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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 plan benefits.

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	\$0	\$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	\$0	\$0

Change in Tier 1/Tier 2 Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2013.

	Before Changes	After Changes	Net Change
Normal Cost	\$0	\$0	\$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount that would need to be set aside to provide for the benefits already earned to date.

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	\$0	\$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ Total Active Members	\$0	\$0
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	\$0	\$0

Change in Tier 1/Tier 2 Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2013.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$0	\$0	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	\$0	\$0
2. Actuarial value of assets	1	0
3. Unfunded accrued liability (1. – 2.)	(1)	0
4. Funded percentage (2. ÷ 1.)	100%	0%
5. Combined valuation payroll	\$74,622	\$31,785
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	0%	0%

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation has established a 20-year closed-period amortization schedule for outstanding regular Tier 1/Tier 2 UAL amounts. As part of the 2012 review of actuarial methods and assumption, the PERS Board decided to reset the Tier 1/Tier 2 amortization period to 20 years effective with the current valuation. This means the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer is re-amortized over a 20-year period. For subsequent odd-year valuations, amortization schedules will be calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases.

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	(\$1)	\$0
Total				(\$1)	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

The system-wide report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	\$0
b. Normal cost at December 31, 2012	0
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	0
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	0
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 (e. + f.)	0
2. Actuarial accrued liability at December 31, 2013	0
3. Gain/(loss) on actuarial accrued liability (1.g. - 2.)	0
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	0
b. Contributions for 2013 ¹	77
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	3
e. Expected actuarial value of assets at December 31, 2013 (a. + b. + c. + d.)	80
5. Actuarial value of assets at December 31, 2013	1
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	(79)
7. Total actuarial gain/(loss) (3. + 6.)	(\$79)

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2012, is provided below.

1. UAL at December 31, 2012	\$0
2. Expected increase	(80)
3. Liability (gain)/loss	0
4. Asset (gain)/loss	79
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 (1. + 2. + 3. + 4. + 5.)	(\$1)

¹ Includes rate relief from side accounts.

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

For independent employers, the normal cost calculated previously is divided by expected payroll to determine a normal cost rate. The table below shows the development of the rate for each tier and member classification.

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	\$0	\$0	0.00%	\$0	\$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	\$0	\$0	14.24%	\$0	\$0	14.33%

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	(\$1)	\$0
2. Next year's Tier 1/Tier 2 UAL payment	0	0
3. Combined valuation payroll	74,622	31,785
4. Tier 1/Tier 2 UAL rate (2. ÷ 3.)	0.00%	0.00%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate for Tier 1/Tier 2. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates apply to combined valuation payroll. These rates do not reflect adjustments due to the rate collar, the minimum 6 percent rate for independent employers with fewer than 2,500 members, or side accounts.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
b. Tier 1/Tier 2 UAL rate	0.00%	0.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate (a. + b. + c.)	14.39%	14.46%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

Employer contribution rates are generally limited to change by no more than the greater of 3 percentage points or 20 percent from the current contribution rate. However, if the funded percentage excluding side accounts is below 60 percent or above 140 percent the rate collar doubles in size. If the funded percentage excluding side accounts is between 60 and 70 percent or 130 and 140 percent, the size of the collar is increased on a graded scale. In addition, for independent employers with less than 2,500 active members, the net employer Tier 1/Tier 2 pension contribution rate cannot be less than 6 percent. All collar and minimum rate calculations are performed prior to adjustments for side accounts and the OPSRP UAL rate.

The table below shows the current contribution rate for the period from July 1, 2013 through June 30, 2015, develops the maximum and minimum contribution rates effective July 1, 2015 based on the collar, and calculates the net adjustment due to the collar and minimum independent employer contribution rate. The net adjustment due to the rate collar is applied to the pension UAL rate. The net adjustment due to the 6 percent minimum independent employer contribution rate is applied to the pension normal cost rate.

1. Current net Tier 1/Tier 2 pension contribution rate	14.39%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate (1. – 2.)	14.39%
4. Size of rate collar	
a. 20% of current employer contribution rate (20% x 3.)	N/A
b. Preliminary size of rate collar (maximum of 3% or a.)	N/A
c. Funded percentage	N/A
d. Size of rate collar (If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)	N/A
5. July 1, 2015 minimum employer contribution rate (3. – 4.d. but not < 0%)	N/A
6. July 1, 2015 maximum employer contribution rate (3. + 4.d.)	N/A
7. July 1, 2015 total pension rate, before adjustment	N/A
8. Net adjustment due to rate collar (5. – 7., but not < 0, or 6. – 7., but not > 0)	N/A
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	N/A
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar (8. + 9.)	N/A
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	N/A
12. Tier 1/Tier 2 retiree healthcare rate	N/A
13. Net adjustment due to 6% minimum (6% - 11. - 12., minimum 0%)	N/A
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	N/A
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment (13. + 14.)	N/A
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment (11. + 13.)	N/A

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Tier 1/Tier 2 Employer Contribution Rate Summary (Post-Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar and the 6 percent minimum employer contribution rate.

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.24%	14.33%
b. Tier 1/Tier 2 UAL rate	0.00%	0.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate <i>(a. + b. + c., minimum of 5.47%)</i>	14.39%	14.46%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	\$0	\$0	\$0
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	0	0
OPSRP valuation payroll	0	74,622	74,622
Combined valuation payroll	\$0	\$74,622	\$74,622

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members ¹								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	2	2	0	0	1	1
Total	0	0	2	2	0	0	1	1
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Grand Total Number of Members	0	0	2	2	0	0	1	1

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

Employer Tier 1/Tier 2 Active Members as of December 31, 2013

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	0	0	0	0	0	0	0	0

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members			Retired Members and Beneficiaries		
Age	Count	Average Deferred Monthly Benefit	Age	Count	Average Monthly Benefit
<20			<45		
20-24			45-49		
25-29			50-54		
30-34			55-59		
35-39			60-64		
40-44			65-69		
45-49			70-74		
50-54			75-79		
55-59			80-84		
60-64			85-89		
65-69			90-94		
70-74			95-99		
75+			100+		
Total			Total		

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.



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

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