Milliman
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September 2014

Gaston Rural Fire Protection District/2608
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.

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.

Milliman

September 2014
Gaston Rural Fire Protection District/2608

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

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ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Gaston Rural Fire Protection District -- #2608

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Gaston 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 Gaston 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 Gaston Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.92%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.99%	0.99%	0.99%
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%**	**8.93%**	**13.04%**
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%**	**9.38%**	**13.49%**

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

[1] *Includes Multnomah Fire District #10 rate.*

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 97%.

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	$286,682	$375,548	$88,866	76%	$95,337	93%
12/31/2009	323,110	371,017	47,907	87%	85,462	56%
12/31/2010	341,306	375,975	34,669	91%	100,211	35%
12/31/2011	330,317	371,521	41,204	89%	100,398	41%
12/31/2012	365,393	380,080	14,687	96%	101,729	14%
12/31/2013	402,978	416,448	13,470	97%	108,497	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		
		OPSRP	
	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.

Gaston Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$13,469	$14,687
Allocated pooled OPSRP UAL	7,671	7,170
Side account	0	0
Net unfunded pension actuarial accrued liability	21,140	21,857
Combined valuation payroll	108,497	101,729
Net pension UAL as a percentage of payroll	19%	21%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,502	$2,134

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	$58	$42
Tier 1/Tier 2 valuation payroll	449	305
Tier 1/Tier 2 pension normal cost rate	12.92%	13.77%
Tier 1/ Tier 2 Actuarial accrued liability	$416,448	$380,080
Actuarial asset value	402,979	365,393
Tier 1/Tier 2 Unfunded actuarial accrued liability	13,469	14,687
Tier 1/ Tier 2 Funded status	97%	96%
Combined valuation payroll	$108,497	$101,729
Tier 1/Tier 2 UAL as a percentage of payroll	12%	14%
Tier 1/Tier 2 UAL rate	0.99%	0.14%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	0	0
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	108,497	101,729
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]	$42,506	$37,215
2. Employer reserves	227,434	198,406
3. Benefits in force reserve	133,039	129,772
4. Total market value of assets ***(1. + 2. + 3.)***	**$402,979**	**$365,393**

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	$365,393
2.	Regular employer contributions	(1,558)
3.	Benefit payments and expense	(20,595)
4.	Adjustments[2]	6,121
5.	Interest credited	53,617
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$402,979**

[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	45	36
Tier 2 Police & Fire	13	6
Tier 2 General Service	0	0
Total	**$58**	**$42**

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	$58	$58	$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	$146,127	$119,779
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	33,752	30,787
▪ Tier 2 General Service	20,477	9,414
▪ **Total Active Members**	**$200,356**	**$159,980**
Dormant Members	1,639	1,417
Retired Members and Beneficiaries	214,453	218,683
Total Actuarial Accrued Liability	**$416,448**	**$380,080**

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	$416,448	$416,448	$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	$416,448	$380,080
2. Actuarial value of assets	402,979	365,393
3. Unfunded accrued liability *(1. – 2.)*	13,469	14,687
4. Funded percentage *(2. ÷ 1.)*	97%	96%
5. Combined valuation payroll	$108,497	$101,729
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	12%	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	$13,469	$975
Total				**$13,469**	**$975**

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	$380,080
b. Normal cost at December 31, 2012	42
c. Benefit payments during 2013	(20,432)
d. Interest at 7.75% to December 31, 2013	28,668
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	388,358
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.)*	388,358
2. Actuarial accrued liability at December 31, 2013	416,448
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(28,090)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	365,393
b. Contributions for 2013[1]	(1,558)
c. Benefit payments and expenses during 2013	(20,595)
d. Interest at 7.75% to December 31, 2013	27,460
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	370,700
5. Actuarial value of assets at December 31, 2013	402,979
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	32,279
7. Total actuarial gain/(loss) *(3. + 6.)*	**$4,189**

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	**$14,687**
2. Expected increase	2,971
3. Liability (gain)/loss	28,090
4. Asset (gain)/loss	(32,279)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$13,469**

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	45	324	13.89%	36	265	13.58%
Tier 2 Police & Fire	13	125	10.40%	6	40	15.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$58**	**$449**	**12.92%**	**$42**	**$305**	**13.77%**

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	$13,469	$14,687
2. Next year's Tier 1/Tier 2 UAL payment	975	1,063
3. Combined valuation payroll	108,497	101,729
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.90%	1.04%

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	12.92%	13.77%
b. Tier 1/Tier 2 UAL rate	0.90%	1.04%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.97%	14.94%

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	10.91%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.91%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.18%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	97%
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%)*	7.91%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.91%
7. July 1, 2015 total pension rate, before adjustment	13.97%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.06%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.90%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.84%
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	12.92%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.92%
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	12.92%	13.77%
b. Tier 1/Tier 2 UAL rate	0.84%	0.01%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	13.91%	13.91%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$324	$0	$324
Tier 2	0	125	125
Tier 1/Tier 2 valuation payroll	324	125	449
OPSRP valuation payroll	19,241	88,807	108,048
Combined valuation payroll	**$19,565**	**$88,932**	**$108,497**

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	3	3	0	0	2	2
Total	0	0	4	4	0	0	3	3
Active Members with previous service segments with the employer								
General Service	1	1	N/A	2	1	1	N/A	2
Police & Fire	3	3	N/A	6	3	0	N/A	3
Total	4	4	N/A	8	4	1	N/A	5
Dormant Members								
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
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	2	0	0	2	2	0	0	2
Total	2	0	0	2	2	0	0	2
Grand Total Number of Members	**6**	**5**	**4**	**15**	**6**	**2**	**3**	**11**

[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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54		
55-59	1	137
60-64		
65-69		
70-74		
75+		
Total	1	137

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69	1	214
70-74		
75-79		
80-84	1	2,078
85-89		
90-94		
95-99		
100+		
Total	2	1,146

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Halsey Shedd Rural Fire Protection District/2698
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.

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.

Milliman

September 2014
Halsey Shedd Rural Fire Protection District/2698

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Halsey Shedd Rural Fire Protection District -- #2698

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Halsey Shedd 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 Halsey Shedd 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 Halsey Shedd Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.09%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(8.71%)	(8.71%)	(8.71%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.99%**	**0.00%**	**3.34%**
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	**9.52%**	**0.45%**	**3.79%**

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 134%.

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	8.38%	8.38%
Minimum July 1, 2017 Rate	5.38%	2.38%
Maximum July 1, 2017 Rate	11.38%	14.38%

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	$403,149	$365,385	($37,764)	110%	$117,247	(32%)
12/31/2009	476,525	409,622	(66,903)	116%	122,435	(55%)
12/31/2010	530,634	425,296	(105,338)	125%	81,326	(130%)
12/31/2011	547,694	449,945	(97,749)	122%	108,670	(90%)
12/31/2012	613,020	480,877	(132,143)	127%	139,713	(95%)
12/31/2013	698,072	521,710	(176,362)	134%	144,016	(122%)

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		
		OPSRP	
	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.

Halsey Shedd Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($176,362)	($132,143)
Allocated pooled OPSRP UAL	10,183	9,847
Side account	0	0
Net unfunded pension actuarial accrued liability	(166,179)	(122,296)
Combined valuation payroll	144,016	139,713
Net pension UAL as a percentage of payroll	(115%)	(88%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,993	$2,931

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	$15,150	$14,457
Tier 1/Tier 2 valuation payroll	88,649	85,662
Tier 1/Tier 2 pension normal cost rate	17.09%	16.88%
Tier 1/ Tier 2 Actuarial accrued liability	$521,710	$480,877
Actuarial asset value	698,072	613,020
Tier 1/Tier 2 Unfunded actuarial accrued liability	(176,362)	(132,143)
Tier 1/ Tier 2 Funded status	134%	127%
Combined valuation payroll	$144,016	$139,713
Tier 1/Tier 2 UAL as a percentage of payroll	(122%)	(95%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(8.71%)	(8.47%)
Tier 1/Tier 2 active members [1]	2	2
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	144,016	139,713
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]	$153,638	$139,023
2. Employer reserves	488,432	421,146
3. Benefits in force reserve	56,002	52,851
4. Total market value of assets ***(1. + 2. + 3.)***	**$698,072**	**$613,020**

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	$613,020
2.	Regular employer contributions	1,535
3.	Benefit payments and expense	(8,669)
4.	Adjustments [2]	5,128
5.	Interest credited	87,058
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$698,072**

[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	$13,326	$12,765
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	1,824	1,692
Total	**$15,150**	**$14,457**

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	$15,150	$15,150	$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	$385,032	$346,139
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	14,166	10,894
▪ Tier 2 General Service	32,239	34,783
▪ **Total Active Members**	**$431,437**	**$391,816**
Dormant Members	0	0
Retired Members and Beneficiaries	90,273	89,061
Total Actuarial Accrued Liability	**$521,710**	**$480,877**

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	$521,710	$521,710	$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	$521,710	$480,877
2. Actuarial value of assets	698,072	613,020
3. Unfunded accrued liability *(1. – 2.)*	(176,362)	(132,143)
4. Funded percentage *(2. ÷ 1.)*	134%	127%
5. Combined valuation payroll	$144,016	$139,713
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(122%)	(95%)

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	($176,362)	($12,765)
Total				**($176,362)**	**($12,765)**

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	$480,877
b. Normal cost at December 31, 2012	14,457
c. Benefit payments during 2013	(8,601)
d. Interest at 7.75% to December 31, 2013	38,055
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	524,788
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.)*	524,788
2. Actuarial accrued liability at December 31, 2013	521,710
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	3,078
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	613,020
b. Contributions for 2013[1]	1,535
c. Benefit payments and expenses during 2013	(8,669)
d. Interest at 7.75% to December 31, 2013	47,233
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	653,118
5. Actuarial value of assets at December 31, 2013	698,072
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	44,954
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$48,032**

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	**($132,143)**
2. Expected increase	3,813
3. Liability (gain)/loss	(3,078)
4. Asset (gain)/loss	(44,954)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($176,362)**

[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	$13,326	$72,092	18.48%	$12,765	$69,660	18.32%
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	1,824	16,557	11.02%	1,692	16,002	10.57%
Total	**$15,150**	**$88,649**	**17.09%**	**$14,457**	**$85,662**	**16.88%**

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	($176,362)	($132,143)
2. Next year's Tier 1/Tier 2 UAL payment	(12,765)	(9,564)
3. Combined valuation payroll	144,016	139,713
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(8.86%)	(6.85%)

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	17.09%	16.88%
b. Tier 1/Tier 2 UAL rate	(8.86%)	(6.85%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	8.38%	10.16%

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	134%
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.)*	4.20%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	1.21%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	9.61%
7. July 1, 2015 total pension rate, before adjustment	8.38%
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	(8.86%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(8.86%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.38%
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	17.09%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.09%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	8.38%

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	17.09%	16.88%
b. Tier 1/Tier 2 UAL rate	(8.86%)	(8.60%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	8.38%	8.41%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$72,092	$72,092
Tier 2	16,557	0	16,557
Tier 1/Tier 2 valuation payroll	16,557	72,092	88,649
OPSRP valuation payroll	0	55,367	55,367
Combined valuation payroll	**$16,557**	**$127,459**	**$144,016**

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

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74	2	270
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	2	270

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Harbor Water PUD/2771
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.

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
Harbor Water PUD/2771

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Harbor Water PUD -- #2771

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Harbor Water PUD 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 Harbor Water PUD.

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 Harbor Water PUD

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.45%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(5.41%)	(5.41%)	(5.41%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**9.65%**	**2.53%**	**6.64%**
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	**10.18%**	**2.98%**	**7.09%**

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 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	9.04%	9.04%
Minimum July 1, 2017 Rate	6.04%	3.04%
Maximum July 1, 2017 Rate	12.04%	15.04%

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	$488,851	$453,510	($35,341)	108%	$214,357	(16%)
12/31/2009	585,164	519,548	(65,616)	113%	244,669	(27%)
12/31/2010	661,768	565,410	(96,358)	117%	243,658	(40%)
12/31/2011	685,356	635,506	(49,850)	108%	241,212	(21%)
12/31/2012	796,837	667,827	(129,010)	119%	285,733	(45%)
12/31/2013	919,744	695,744	(224,000)	132%	291,782	(77%)

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		
		OPSRP	
	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.

Harbor Water PUD

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($224,000)	($129,010)
Allocated pooled OPSRP UAL	20,631	20,139
Side account	0	0
Net unfunded pension actuarial accrued liability	(203,369)	(108,871)
Combined valuation payroll	291,782	285,733
Net pension UAL as a percentage of payroll	(70%)	(38%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,039	$5,995

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	$32,633	$32,775
Tier 1/Tier 2 valuation payroll	225,861	234,536
Tier 1/Tier 2 pension normal cost rate	14.45%	13.97%
Tier 1/ Tier 2 Actuarial accrued liability	$695,744	$667,827
Actuarial asset value	919,744	796,837
Tier 1/Tier 2 Unfunded actuarial accrued liability	(224,000)	(129,010)
Tier 1/ Tier 2 Funded status	132%	119%
Combined valuation payroll	$291,782	$285,733
Tier 1/Tier 2 UAL as a percentage of payroll	(77%)	(45%)
Tier 1/Tier 2 UAL rate	(5.41%)	(5.40%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	3	3
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	Actuarial Valuation as of 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) RHIA	Actuarial Valuation as of December 31, 2013	Actuarial Valuation as of December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	291,782	285,733
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]	$234,800	$215,602
2. Employer reserves	656,509	553,867
3. Benefits in force reserve	28,435	27,368
4. Total market value of assets ***(1. + 2. + 3.)***	**$919,744**	**$796,837**

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	$796,837
2.	Regular employer contributions	14,340
3.	Benefit payments and expense	(4,402)
4.	Adjustments [2]	2,825
5.	Interest credited	110,144
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$919,744**

[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	23,905	23,807
Tier 2 Police & Fire	0	0
Tier 2 General Service	8,728	8,968
Total	**$32,633**	**$32,775**

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	$32,633	$32,633	$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	534,617	513,509
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	115,290	108,200
▪ **Total Active Members**	**$649,907**	**$621,709**
Dormant Members	0	0
Retired Members and Beneficiaries	45,837	46,118
Total Actuarial Accrued Liability	**$695,744**	**$667,827**

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	$695,744	$695,744	$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	$695,744	$667,827
2. Actuarial value of assets	919,744	796,837
3. Unfunded accrued liability *(1. – 2.)*	(224,000)	(129,010)
4. Funded percentage *(2. ÷ 1.)*	132%	119%
5. Combined valuation payroll	$291,782	$285,733
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(77%)	(45%)

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	($224,000)	($16,213)
Total				**($224,000)**	**($16,213)**

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	$667,827
b. Normal cost at December 31, 2012	32,775
c. Benefit payments during 2013	(4,367)
d. Interest at 7.75% to December 31, 2013	54,127
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	750,362
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.)*	750,362
2. Actuarial accrued liability at December 31, 2013	695,744
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	54,618
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	796,837
b. Contributions for 2013[1]	14,340
c. Benefit payments and expenses during 2013	(4,402)
d. Interest at 7.75% to December 31, 2013	62,140
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	868,915
5. Actuarial value of assets at December 31, 2013	919,744
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	50,829
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$105,447**

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	**($129,010)**
2. Expected increase	10,457
3. Liability (gain)/loss	(54,618)
4. Asset (gain)/loss	(50,829)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($224,000)**

[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	23,905	159,591	14.98%	23,807	165,178	14.41%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	8,728	66,270	13.17%	8,968	69,358	12.93%
Total	**$32,633**	**$225,861**	**14.45%**	**$32,775**	**$234,536**	**13.97%**

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	($224,000)	($129,010)
2. Next year's Tier 1/Tier 2 UAL payment	(16,213)	(9,338)
3. Combined valuation payroll	291,782	285,733
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(5.56%)	(3.27%)

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	14.45%	13.97%
b. Tier 1/Tier 2 UAL rate	(5.56%)	(3.27%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.04%	10.83%

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	5.57%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	5.57%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.11%
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%)*	1.97%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	9.17%
7. July 1, 2015 total pension rate, before adjustment	9.04%
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	(5.56%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(5.56%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.04%
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	14.45%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.45%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.04%

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	14.45%	13.97%
b. Tier 1/Tier 2 UAL rate	(5.56%)	(5.53%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	9.04%	8.57%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$159,591	$0	$159,591
Tier 2	66,270	0	66,270
Tier 1/Tier 2 valuation payroll	225,861	0	225,861
OPSRP valuation payroll	65,921	0	65,921
Combined valuation payroll	**$291,782**	**$0**	**$291,782**

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	1	2	5	2	1	2	5
Police & Fire	0	0	0	0	0	0	0	0
Total	2	1	2	5	2	1	2	5
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	0	0	0	0	0	0	0
Total	0	1	0	1	0	1	0	1
Grand Total Number of Members	**2**	**2**	**2**	**6**	**2**	**2**	**2**	**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

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

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69	1	348
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	348

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Hermiston Rural Fire Protection District/2815
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.

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.

Milliman

September 2014
Hermiston Rural Fire Protection District/2815

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Hermiston Rural Fire Protection District -- #2815

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Hermiston 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 Hermiston 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 Hermiston Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.07%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.49%	0.49%	0.49%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**16.17%**	**8.43%**	**12.54%**
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	**16.70%**	**8.88%**	**12.99%**

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 95%.

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	15.56%	15.56%
Minimum July 1, 2017 Rate	12.45%	9.34%
Maximum July 1, 2017 Rate	18.67%	21.78%

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	$2,018,646	$3,338,525	$1,319,879	60%	$1,576,005	84%
12/31/2009	2,571,679	3,104,973	533,294	83%	1,788,434	30%
12/31/2010	3,094,148	3,421,790	327,642	90%	1,825,539	18%
12/31/2011	3,353,245	3,852,024	498,779	87%	1,943,699	26%
12/31/2012	4,033,745	4,582,248	548,503	88%	2,169,710	25%
12/31/2013	4,709,799	4,971,080	261,281	95%	2,131,800	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		
		OPSRP	
	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.

Hermiston Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$261,281	$548,503
Allocated pooled OPSRP UAL	150,731	152,927
Side account	0	0
Net unfunded pension actuarial accrued liability	412,012	701,430
Combined valuation payroll	2,131,800	2,169,710
Net pension UAL as a percentage of payroll	19%	32%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$29,506	$45,521

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	$215,693	$236,926
Tier 1/Tier 2 valuation payroll	1,431,731	1,553,425
Tier 1/Tier 2 pension normal cost rate	15.07%	15.25%
Tier 1/ Tier 2 Actuarial accrued liability	$4,971,080	$4,582,248
Actuarial asset value	4,709,799	4,033,745
Tier 1/Tier 2 Unfunded actuarial accrued liability	261,281	548,503
Tier 1/ Tier 2 Funded status	95%	88%
Combined valuation payroll	$2,131,800	$2,169,710
Tier 1/Tier 2 UAL as a percentage of payroll	12%	25%
Tier 1/Tier 2 UAL rate	0.49%	0.31%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	16	17
Tier 1/Tier 2 dormant members	2	2
Tier 1/Tier 2 retirees and beneficiaries	7	7

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	2,131,800	2,169,710
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]	$473,831	$464,039
2. Employer reserves	3,561,211	3,176,348
3. Benefits in force reserve	674,757	393,358
4. Total market value of assets *(1. + 2. + 3.)*	**$4,709,799**	**$4,033,745**

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	$4,033,745
2. Regular employer contributions	202,444
3. Benefit payments and expense	(104,455)
4. Adjustments [2]	(63,169)
5. Interest credited	641,234
6. Total transferred from side accounts	0
7. Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)*	**$4,709,799**

[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	$81,118	$105,880
Tier 1 General Service	9,667	9,380
Tier 2 Police & Fire	124,908	121,666
Tier 2 General Service	0	0
Total	**$215,693**	**$236,926**

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	$215,693	$215,693	$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	$1,722,710	$1,993,006
▪ Tier 1 General Service	133,440	119,651
▪ Tier 2 Police & Fire	1,967,433	1,749,616
▪ Tier 2 General Service	30,253	30,244
▪ **Total Active Members**	**$3,853,836**	**$3,892,517**
Dormant Members	29,559	26,868
Retired Members and Beneficiaries	1,087,685	662,863
Total Actuarial Accrued Liability	**$4,971,080**	**$4,582,248**

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	$4,971,080	$4,971,080	$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	$4,971,080	$4,582,248
2. Actuarial value of assets	4,709,799	4,033,745
3. Unfunded accrued liability *(1. – 2.)*	261,281	548,503
4. Funded percentage *(2. ÷ 1.)*	95%	88%
5. Combined valuation payroll	$2,131,800	$2,169,710
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	12%	25%

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	$261,281	$18,911
Total				**$261,281**	**$18,911**

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	$4,582,248
b. Normal cost at December 31, 2012	236,926
c. Benefit payments during 2013	(103,627)
d. Interest at 7.75% to December 31, 2013	369,470
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	5,085,017
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.)*	5,085,017
2. Actuarial accrued liability at December 31, 2013	4,971,080
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	113,937
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	4,033,745
b. Contributions for 2013[1]	202,444
c. Benefit payments and expenses during 2013	(104,455)
d. Interest at 7.75% to December 31, 2013	316,412
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	4,448,147
5. Actuarial value of assets at December 31, 2013	4,709,799
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	261,652
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$375,589**

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	**$548,503**
2. Expected increase	88,367
3. Liability (gain)/loss	(113,937)
4. Asset (gain)/loss	(261,652)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$261,281**

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	$81,118	$508,634	15.95%	$105,880	$649,547	16.30%
Tier 1 General Service	9,667	61,790	15.64%	9,380	60,847	15.42%
Tier 2 Police & Fire	124,908	861,307	14.50%	121,666	843,031	14.43%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$215,693**	**$1,431,731**	**15.07%**	**$236,926**	**$1,553,425**	**15.25%**

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	$261,281	$548,503
2. Next year's Tier 1/Tier 2 UAL payment	18,911	39,701
3. Combined valuation payroll	2,131,800	2,169,710
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.89%	1.83%

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	15.07%	15.25%
b. Tier 1/Tier 2 UAL rate	0.89%	1.83%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	16.11%	17.21%

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	12.56%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	12.56%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.51%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	95%
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%)*	9.56%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	15.56%
7. July 1, 2015 total pension rate, before adjustment	16.11%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.55%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.89%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.34%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	15.56%
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	15.07%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.07%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	15.56%

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	15.07%	15.25%
b. Tier 1/Tier 2 UAL rate	0.34%	0.18%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	15.56%	15.56%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$61,790	$508,634	$570,424
Tier 2	0	861,307	861,307
Tier 1/Tier 2 valuation payroll	61,790	1,369,941	1,431,731
OPSRP valuation payroll	36,457	663,612	700,069
Combined valuation payroll	**$98,247**	**$2,033,553**	**$2,131,800**

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	1	2	1	0	1	2
Police & Fire	5	10	10	25	6	10	7	23
Total	6	10	11	27	7	10	8	25
Active Members with previous service segments with the employer								
General Service	1	1	N/A	2	1	0	N/A	1
Police & Fire	2	6	N/A	8	1	2	N/A	3
Total	3	7	N/A	10	2	2	N/A	4
Dormant Members								
General Service	0	1	0	1	0	1	0	1
Police & Fire	1	0	1	2	1	0	0	1
Total	1	1	1	3	1	1	0	2
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	7	0	0	7	7	0	0	7
Total	7	0	0	7	7	0	0	7
Grand Total Number of Members	**17**	**18**	**12**	**47**	**17**	**13**	**8**	**38**

[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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39			3							3
40-44			4							4
45-49			1	1	2					4
50-54			1			3				4
55-59			1							1
60-64										
65-69										
70-74										
75+										
Total	0	0	10	1	2	3	0	0	0	16

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49	1	203
50-54	1	179
55-59		
60-64		
65-69		
70-74		
75+		
Total	2	191

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	2	907
60-64	3	1,608
65-69	1	0
70-74	1	429
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	7	1,010

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Ice Fountain Water District/2717
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
Ice Fountain Water District/2717

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
Ice Fountain Water District/2717

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Ice Fountain Water District -- #2717

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Ice Fountain Water 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 Ice Fountain Water 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 Ice Fountain Water District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.55%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.84%)	(0.84%)	(0.84%)
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%**	**7.10%**	**11.21%**
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%**	**7.55%**	**11.66%**

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 102%.

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	$528,847	$615,835	$86,988	86%	$160,298	54%
12/31/2009	602,075	649,537	47,462	93%	169,216	28%
12/31/2010	642,750	676,412	33,662	95%	180,977	19%
12/31/2011	636,512	704,868	68,356	90%	223,782	31%
12/31/2012	708,964	738,703	29,739	96%	236,893	13%
12/31/2013	794,979	776,808	(18,171)	102%	206,630	(9%)

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		
		OPSRP	
	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.

Ice Fountain Water District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($18,171)	$29,739
Allocated pooled OPSRP UAL	14,610	16,697
Side account	0	0
Net unfunded pension actuarial accrued liability	(3,561)	46,436
Combined valuation payroll	206,630	236,893
Net pension UAL as a percentage of payroll	(2%)	20%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,860	$4,970

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	$12,799	$12,304
Tier 1/Tier 2 valuation payroll	101,972	98,959
Tier 1/Tier 2 pension normal cost rate	12.55%	12.43%
Tier 1/ Tier 2 Actuarial accrued liability	$776,808	$738,703
Actuarial asset value	794,979	708,964
Tier 1/Tier 2 Unfunded actuarial accrued liability	(18,171)	29,739
Tier 1/ Tier 2 Funded status	102%	96%
Combined valuation payroll	$206,630	$236,893
Tier 1/Tier 2 UAL as a percentage of payroll	(9%)	13%
Tier 1/Tier 2 UAL rate	(0.84%)	(0.72%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	206,630	236,893
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]	$104,048	$93,855
2. Employer reserves	439,779	373,928
3. Benefits in force reserve	251,152	241,182
4. Total market value of assets ***(1. + 2. + 3.)***	**$794,979**	**$708,964**

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	$708,964
2.	Regular employer contributions	6,735
3.	Benefit payments and expense	(38,879)
4.	Adjustments [2]	15,458
5.	Interest credited	102,700
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$794,979**

[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	12,799	12,304
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$12,799**	**$12,304**

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	$12,799	$12,799	$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	371,961	332,278
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$371,961**	**$332,278**
Dormant Members	0	0
Retired Members and Beneficiaries	404,847	406,425
Total Actuarial Accrued Liability	**$776,808**	**$738,703**

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	$776,808	$776,808	$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	$776,808	$738,703
2. Actuarial value of assets	794,979	708,964
3. Unfunded accrued liability *(1. – 2.)*	(18,171)	29,739
4. Funded percentage *(2. ÷ 1.)*	102%	96%
5. Combined valuation payroll	$206,630	$236,893
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(9%)	13%

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	($18,171)	($1,315)
Total				**($18,171)**	**($1,315)**

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	$738,703
b. Normal cost at December 31, 2012	12,304
c. Benefit payments during 2013	(38,571)
d. Interest at 7.75% to December 31, 2013	56,708
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	769,144
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.)*	769,144
2. Actuarial accrued liability at December 31, 2013	776,808
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(7,664)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	708,964
b. Contributions for 2013[1]	6,735
c. Benefit payments and expenses during 2013	(38,879)
d. Interest at 7.75% to December 31, 2013	53,699
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	730,520
5. Actuarial value of assets at December 31, 2013	794,979
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	64,459
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$56,795**

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	**$29,739**
2. Expected increase	8,885
3. Liability (gain)/loss	7,664
4. Asset (gain)/loss	(64,459)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($18,171)**

[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	12,799	101,972	12.55%	12,304	98,959	12.43%
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	**$12,799**	**$101,972**	**12.55%**	**$12,304**	**$98,959**	**12.43%**

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	($18,171)	$29,739
2. Next year's Tier 1/Tier 2 UAL payment	(1,315)	2,153
3. Combined valuation payroll	206,630	236,893
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.64%)	0.91%

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	12.55%	12.43%
b. Tier 1/Tier 2 UAL rate	(0.64%)	0.91%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	12.06%	13.47%

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	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	102%
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	12.06%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.35%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(0.64%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.99%)
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	12.55%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.55%
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	12.55%	12.43%
b. Tier 1/Tier 2 UAL rate	(0.99%)	(0.85%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	11.71%	11.71%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$101,972	$0	$101,972
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	101,972	0	101,972
OPSRP valuation payroll	104,658	0	104,658
Combined valuation payroll	**$206,630**	**$0**	**$206,630**

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	3	4
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	2	3	1	0	3	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	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	**4**	**0**	**2**	**6**	**4**	**0**	**3**	**7**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<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**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	1	15
65-69	1	2,772
70-74		
75-79		
80-84	1	428
85-89		
90-94		
95-99		
100+		
Total	3	1,072

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Jackson County Fire District #5/2556
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.

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.

Milliman

September 2014
Jackson County Fire District #5/2556

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Jackson County Fire District #5 -- #2556

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Jackson County Fire District #5 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 Jackson County Fire District #5.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Jackson County Fire District #5

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.77%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.99%	0.99%	0.99%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**19.37%**	**8.93%**	**13.04%**
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	**19.90%**	**9.38%**	**13.49%**

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

[1] *Includes Multnomah Fire District #10 rate.*

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 90%.

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	18.76%	18.76%
Minimum July 1, 2017 Rate	15.01%	11.26%
Maximum July 1, 2017 Rate	22.51%	26.26%

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	$9,985,499	$12,541,487	$2,555,988	80%	$1,804,189	142%
12/31/2009	11,458,597	13,191,131	1,732,534	87%	1,937,662	89%
12/31/2010	12,338,988	14,587,295	2,248,307	85%	2,158,071	104%
12/31/2011	11,630,678	14,920,503	3,289,825	78%	2,094,912	157%
12/31/2012	12,643,144	15,114,250	2,471,106	84%	2,256,324	110%
12/31/2013	14,169,543	15,674,310	1,504,767	90%	2,407,905	62%

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		
		OPSRP	
	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.

Jackson County Fire District #5

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$1,504,767	$2,471,106
Allocated pooled OPSRP UAL	170,254	159,032
Side account	0	0
Net unfunded pension actuarial accrued liability	1,675,021	2,630,138
Combined valuation payroll	2,407,905	2,256,324
Net pension UAL as a percentage of payroll	70%	117%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$33,328	$47,339

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	$253,066	$242,990
Tier 1/Tier 2 valuation payroll	1,423,886	1,380,781
Tier 1/Tier 2 pension normal cost rate	17.77%	17.60%
Tier 1/ Tier 2 Actuarial accrued liability	$15,674,310	$15,114,250
Actuarial asset value	14,169,543	12,643,144
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,504,767	2,471,106
Tier 1/ Tier 2 Funded status	90%	84%
Combined valuation payroll	$2,407,905	$2,256,324
Tier 1/Tier 2 UAL as a percentage of payroll	62%	110%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	0.99%	1.16%
Tier 1/Tier 2 active members [1]	15	15
Tier 1/Tier 2 dormant members	2	2
Tier 1/Tier 2 retirees and beneficiaries	22	22

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	2,407,905	2,256,324
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]	$1,725,802	$1,558,593
2. Employer reserves	6,723,585	5,595,042
3. Benefits in force reserve	5,720,156	5,489,509
4. Total market value of assets ***(1. + 2. + 3.)***	**$14,169,543**	**$12,643,144**

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	$12,643,144
2.	Regular employer contributions	223,530
3.	Benefit payments and expense	(885,504)
4.	Adjustments [2]	355,104
5.	Interest credited	1,833,269
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$14,169,543**

[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	$145,383	$140,011
Tier 1 General Service	0	0
Tier 2 Police & Fire	100,730	96,339
Tier 2 General Service	6,953	6,640
Total	**$253,066**	**$242,990**

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	$253,066	$253,066	$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	$4,685,519	$4,313,084
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	1,352,112	1,163,155
▪ Tier 2 General Service	139,946	124,540
▪ **Total Active Members**	**$6,177,577**	**$5,600,779**
Dormant Members	276,042	262,890
Retired Members and Beneficiaries	9,220,691	9,250,581
Total Actuarial Accrued Liability	**$15,674,310**	**$15,114,250**

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	$15,674,310	$15,674,310	$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	$15,674,310	$15,114,250
2. Actuarial value of assets	14,169,543	12,643,144
3. Unfunded accrued liability *(1. – 2.)*	1,504,767	2,471,106
4. Funded percentage *(2. ÷ 1.)*	90%	84%
5. Combined valuation payroll	$2,407,905	$2,256,324
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	62%	110%

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	$1,504,767	$108,915
Total				**$1,504,767**	**$108,915**

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	$15,114,250
b. Normal cost at December 31, 2012	242,990
c. Benefit payments during 2013	(878,481)
d. Interest at 7.75% to December 31, 2013	1,156,145
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	15,634,904
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.)*	15,634,904
2. Actuarial accrued liability at December 31, 2013	15,674,310
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(39,406)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	12,643,144
b. Contributions for 2013[1]	223,530
c. Benefit payments and expenses during 2013	(885,504)
d. Interest at 7.75% to December 31, 2013	954,192
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	12,935,363
5. Actuarial value of assets at December 31, 2013	14,169,543
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	1,234,180
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$1,194,774**

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	**$2,471,106**
2. Expected increase	228,435
3. Liability (gain)/loss	39,406
4. Asset (gain)/loss	(1,234,180)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$1,504,767**

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	$145,383	$697,310	20.85%	$140,011	$682,734	20.51%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	100,730	667,158	15.10%	96,339	640,479	15.04%
Tier 2 General Service	6,953	59,418	11.70%	6,640	57,568	11.53%
Total	**$253,066**	**$1,423,886**	**17.77%**	**$242,990**	**$1,380,781**	**17.60%**

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	$1,504,767	$2,471,106
2. Next year's Tier 1/Tier 2 UAL payment	108,915	178,858
3. Combined valuation payroll	2,407,905	2,256,324
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	4.52%	7.93%

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	17.77%	17.60%
b. Tier 1/Tier 2 UAL rate	4.52%	7.93%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	22.44%	25.66%

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	15.63%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	15.63%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.13%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.13%
c. Funded percentage	90%
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.)*	3.13%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	12.50%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	18.76%
7. July 1, 2015 total pension rate, before adjustment	22.44%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(3.68%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	4.52%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.84%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	18.76%
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	17.77%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.77%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	18.76%

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	17.77%	17.60%
b. Tier 1/Tier 2 UAL rate	0.84%	1.03%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	18.76%	18.76%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$697,310	$697,310
Tier 2	59,418	667,158	726,576
Tier 1/Tier 2 valuation payroll	59,418	1,364,468	1,423,886
OPSRP valuation payroll	24,749	959,270	984,019
Combined valuation payroll	**$84,167**	**$2,323,738**	**$2,407,905**

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	1	2	0	1	1	2
Police & Fire	7	7	12	26	7	7	11	25
Total	7	8	13	28	7	8	12	27
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	1	1	N/A	2	1	0	N/A	1
Total	1	1	N/A	2	1	0	N/A	1
Dormant Members								
General Service	1	0	0	1	1	0	0	1
Police & Fire	0	1	0	1	0	1	0	1
Total	1	1	0	2	1	1	0	2
Retired Members and Beneficiaries								
General Service	2	0	0	2	2	0	0	2
Police & Fire	20	0	0	20	18	2	0	20
Total	22	0	0	22	20	2	0	22
Grand Total Number of Members	**31**	**10**	**13**	**54**	**29**	**11**	**12**	**52**

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

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54	1	1,129
55-59		
60-64		
65-69		
70-74	1	1,346
75+		
Total	2	1,238

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	4	3,788
55-59	1	4,056
60-64	9	3,092
65-69	4	2,506
70-74	2	1,992
75-79		
80-84	1	786
85-89	1	226
90-94		
95-99		
100+		
Total	22	2,821

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Jefferson County Rural Fire Protection District #1/2575
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
Jefferson County Rural Fire Protection District #1/2575

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.

Milliman

September 2014
Jefferson County Rural Fire Protection District #1/2575

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Jefferson County Rural Fire Protection District #1 -- #2575

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Jefferson County Rural Fire Protection District #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 Jefferson County Rural Fire Protection District #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 Jefferson County Rural Fire Protection District #1

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.29%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.77%	0.77%	0.77%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**13.67%**	**8.71%**	**12.82%**
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	**14.20%**	**9.16%**	**13.27%**

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 97%.

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	13.06%	13.06%
Minimum July 1, 2017 Rate	10.06%	7.06%
Maximum July 1, 2017 Rate	16.06%	19.06%

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	$1,408,857	$1,571,096	$162,239	90%	$170,011	95%
12/31/2009	1,549,973	1,693,055	143,082	92%	229,869	62%
12/31/2010	1,682,599	1,644,460	(38,139)	102%	256,314	(15%)
12/31/2011	1,590,509	1,837,042	246,533	87%	304,654	81%
12/31/2012	1,740,658	1,800,503	59,845	97%	300,941	20%
12/31/2013	1,872,829	1,921,988	49,159	97%	298,613	16%

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		
		OPSRP	
	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.

Jefferson County Rural Fire Protection District #1

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$49,159	$59,845
Allocated pooled OPSRP UAL	21,114	21,211
Side account	0	0
Net unfunded pension actuarial accrued liability	70,273	81,056
Combined valuation payroll	298,613	300,941
Net pension UAL as a percentage of payroll	24%	27%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,133	$6,314

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	$8,072	$7,521
Tier 1/Tier 2 valuation payroll	65,685	61,080
Tier 1/Tier 2 pension normal cost rate	12.29%	12.31%
Tier 1/ Tier 2 Actuarial accrued liability	$1,921,988	$1,800,503
Actuarial asset value	1,872,829	1,740,658
Tier 1/Tier 2 Unfunded actuarial accrued liability	49,159	59,845
Tier 1/ Tier 2 Funded status	97%	97%
Combined valuation payroll	$298,613	$300,941
Tier 1/Tier 2 UAL as a percentage of payroll	16%	20%
Tier 1/Tier 2 UAL rate	0.77%	0.75%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	2	2
Tier 1/Tier 2 dormant members	1	1
Tier 1/Tier 2 retirees and beneficiaries	6	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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	298,613	300,941
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]	$128,976	$166,823
2. Employer reserves	803,643	784,599
3. Benefits in force reserve	940,211	789,235
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,872,829**	**$1,740,658**

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	$1,740,658
2.	Regular employer contributions	18,479
3.	Benefit payments and expense	(145,549)
4.	Adjustments[2]	10,601
5.	Interest credited	248,641
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,872,829**

[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	8,072	7,521
Tier 2 General Service	0	0
Total	**$8,072**	**$7,521**

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	$8,072	$8,072	$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	$106,013
▪ Tier 1 General Service	160,475	148,589
▪ Tier 2 Police & Fire	112,636	93,966
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$273,111**	**$348,568**
Dormant Members	133,291	121,965
Retired Members and Beneficiaries	1,515,586	1,329,970
Total Actuarial Accrued Liability	**$1,921,988**	**$1,800,503**

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	$1,921,988	$1,921,988	$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	$1,921,988	$1,800,503
2. Actuarial value of assets	1,872,829	1,740,658
3. Unfunded accrued liability *(1. – 2.)*	49,159	59,845
4. Funded percentage *(2. ÷ 1.)*	97%	97%
5. Combined valuation payroll	$298,613	$300,941
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	16%	20%

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	$49,159	$3,558
Total				**$49,159**	**$3,558**

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	$1,800,503
b. Normal cost at December 31, 2012	7,521
c. Benefit payments during 2013	(144,394)
d. Interest at 7.75% to December 31, 2013	134,527
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,798,157
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.)*	1,798,157
2. Actuarial accrued liability at December 31, 2013	1,921,988
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(123,831)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,740,658
b. Contributions for 2013[1]	18,479
c. Benefit payments and expenses during 2013	(145,549)
d. Interest at 7.75% to December 31, 2013	129,977
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,743,565
5. Actuarial value of assets at December 31, 2013	1,872,829
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	129,265
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$5,434**

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	**$59,845**
2. Expected increase	(5,252)
3. Liability (gain)/loss	123,831
4. Asset (gain)/loss	(129,265)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$49,159**

[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	8,072	65,685	12.29%	7,521	61,080	12.31%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$8,072**	**$65,685**	**12.29%**	**$7,521**	**$61,080**	**12.31%**

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	$49,159	$59,845
2. Next year's Tier 1/Tier 2 UAL payment	3,558	4,332
3. Combined valuation payroll	298,613	300,941
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	1.19%	1.44%

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	12.29%	12.31%
b. Tier 1/Tier 2 UAL rate	1.19%	1.44%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.63%	13.88%

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	10.06%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.06%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.01%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	97%
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%)*	7.06%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.06%
7. July 1, 2015 total pension rate, before adjustment	13.63%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.57%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	1.19%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.62%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.06%
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	12.29%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.29%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.06%

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	12.29%	12.31%
b. Tier 1/Tier 2 UAL rate	0.62%	0.62%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	13.06%	13.06%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	0	65,685	65,685
Tier 1/Tier 2 valuation payroll	0	65,685	65,685
OPSRP valuation payroll	0	232,928	232,928
Combined valuation payroll	**$0**	**$298,613**	**$298,613**

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	1	3	4	0	1	3	4
Total	1	1	3	5	1	1	3	5
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	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	6	0	1	7	5	0	1	6
Total	6	0	1	7	5	0	1	6
Grand Total Number of Members	**8**	**1**	**4**	**13**	**8**	**1**	**4**	**13**

[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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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					1					1
75+										
Total	0	0	1	0	1	0	0	0	0	2

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49	1	2,100
50-54		
55-59		
60-64		
65-69		
70-74		
75+		
Total	1	2,100

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	2	1,883
55-59	1	1,376
60-64	3	1,311
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	6	1,513

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Jefferson County Soil & Water Conservation District/2841
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.

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

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

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

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

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

September 2014
Jefferson County Soil & Water Conservation District/2841

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Jefferson County Soil & Water Conservation District -- #2841

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Jefferson County Soil & 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 Jefferson County Soil & 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 Jefferson County Soil & Water Conservation District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	8.97%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.56%)	(0.56%)	(0.56%)
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%**	**7.38%**	**11.49%**
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	**9.55%**	**7.83%**	**11.94%**

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 96%.

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	$112,885	$91,646	($21,239)	123%	$137,000	(16%)
12/31/2009	140,414	101,931	(38,483)	138%	132,003	(29%)
12/31/2010	134,596	126,517	(8,079)	106%	115,888	(7%)
12/31/2011	132,805	131,462	(1,343)	101%	140,343	(1%)
12/31/2012	147,933	162,410	14,477	91%	185,702	8%
12/31/2013	167,632	175,485	7,853	96%	111,298	7%

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		
		OPSRP	
	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.

Jefferson County Soil & Water Conservation District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$7,853	$14,477
Allocated pooled OPSRP UAL	7,869	13,089
Side account	0	0
Net unfunded pension actuarial accrued liability	15,722	27,566
Combined valuation payroll	111,298	185,702
Net pension UAL as a percentage of payroll	14%	15%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,540	$3,896

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	$5,412	$5,075
Tier 1/Tier 2 valuation payroll	60,307	57,522
Tier 1/Tier 2 pension normal cost rate	8.97%	8.82%
Tier 1/ Tier 2 Actuarial accrued liability	$175,485	$162,410
Actuarial asset value	167,632	147,933
Tier 1/Tier 2 Unfunded actuarial accrued liability	7,853	14,477
Tier 1/ Tier 2 Funded status	96%	91%
Combined valuation payroll	$111,298	$185,702
Tier 1/Tier 2 UAL as a percentage of payroll	7%	8%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(0.56%)	(0.41%)
Tier 1/Tier 2 active members [1]	1	1
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	Actuarial Valuation as of 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) **RHIA**	Actuarial Valuation as of December 31, 2013	Actuarial Valuation as of December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	111,298	185,702
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]	$18,397	$15,360
2. Employer reserves	103,901	88,757
3. Benefits in force reserve	45,334	43,816
4. Total market value of assets ***(1. + 2. + 3.)***	**$167,632**	**$147,933**

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	$147,933
2.	Regular employer contributions	1,259
3.	Benefit payments and expense	(7,018)
4.	Adjustments[2]	2,388
5.	Interest credited	23,071
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$167,632**

[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	5,412	5,075
Total	**$5,412**	**$5,075**

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	$5,412	$5,412	$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	102,408	88,574
▪ **Total Active Members**	**$102,408**	**$88,574**
Dormant Members	0	0
Retired Members and Beneficiaries	73,077	73,836
Total Actuarial Accrued Liability	**$175,485**	**$162,410**

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	$175,485	$175,485	$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	$175,485	$162,410
2. Actuarial value of assets	167,632	147,933
3. Unfunded accrued liability *(1. – 2.)*	7,853	14,477
4. Funded percentage *(2. ÷ 1.)*	96%	91%
5. Combined valuation payroll	$111,298	$185,702
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	7%	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	$7,853	$568
Total				**$7,853**	**$568**

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	$162,410
b. Normal cost at December 31, 2012	5,075
c. Benefit payments during 2013	(6,962)
d. Interest at 7.75% to December 31, 2013	12,710
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	173,233
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.)*	173,233
2. Actuarial accrued liability at December 31, 2013	175,485
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(2,252)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	147,933
b. Contributions for 2013[1]	1,259
c. Benefit payments and expenses during 2013	(7,018)
d. Interest at 7.75% to December 31, 2013	11,242
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	153,415
5. Actuarial value of assets at December 31, 2013	167,632
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	14,217
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$11,965**

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	**$14,477**
2. Expected increase	5,341
3. Liability (gain)/loss	2,252
4. Asset (gain)/loss	(14,217)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$7,853**

[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	5,412	60,307	8.97%	5,075	57,522	8.82%
Total	**$5,412**	**$60,307**	**8.97%**	**$5,075**	**$57,522**	**8.82%**

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	$7,853	$14,477
2. Next year's Tier 1/Tier 2 UAL payment	568	1,048
3. Combined valuation payroll	111,298	185,702
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.51%	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	8.97%	8.82%
b. Tier 1/Tier 2 UAL rate	0.51%	0.56%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.63%	9.51%

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	96%
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	9.63%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(1.22%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.51%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.71%)
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	8.97%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	8.97%
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	8.97%	8.82%
b. Tier 1/Tier 2 UAL rate	(0.71%)	(0.54%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	8.41%	8.41%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	60,307	0	60,307
Tier 1/Tier 2 valuation payroll	60,307	0	60,307
OPSRP valuation payroll	50,991	0	50,991
Combined valuation payroll	**$111,298**	**$0**	**$111,298**

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	1	2	0	1	3	4
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	1	2	0	1	3	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	0	1	1	2	0	1	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	1	2	0	1	0	1
Grand Total Number of Members	**0**	**2**	**2**	**4**	**0**	**2**	**3**	**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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74	1	609
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	609

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Jefferson County/2006
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.

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

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

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

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

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

September 2014
Jefferson County/2006

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Jefferson County -- #2006

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Jefferson 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 Jefferson 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 Jefferson County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.48%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.59%	0.59%	0.59%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**15.68%**	**8.53%**	**12.64%**
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	**16.21%**	**8.98%**	**13.09%**

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 98%.

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	15.07%	15.07%
Minimum July 1, 2017 Rate	12.06%	9.05%
Maximum July 1, 2017 Rate	18.08%	21.09%

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	$21,467,039	$26,384,656	$4,917,617	81%	$6,156,067	80%
12/31/2009	24,737,248	28,038,860	3,301,612	88%	6,027,492	55%
12/31/2010	26,047,852	28,853,513	2,805,661	90%	5,776,442	49%
12/31/2011	25,322,119	30,409,250	5,087,131	83%	5,991,100	85%
12/31/2012	28,079,743	30,329,042	2,249,299	93%	5,795,860	39%
12/31/2013	30,314,168	30,961,235	647,067	98%	5,612,190	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		
		OPSRP	
	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.

Jefferson County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$647,067	$2,249,299
Allocated pooled OPSRP UAL	396,816	408,508
Side account	0	0
Net unfunded pension actuarial accrued liability	1,043,883	2,657,807
Combined valuation payroll	5,612,190	5,795,860
Net pension UAL as a percentage of payroll	19%	46%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$77,679	$121,600

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	$312,023	$398,294
Tier 1/Tier 2 valuation payroll	2,154,971	2,592,358
Tier 1/Tier 2 pension normal cost rate	14.48%	15.36%
Tier 1/ Tier 2 Actuarial accrued liability	$30,961,235	$30,329,042
Actuarial asset value	30,314,168	28,079,743
Tier 1/Tier 2 Unfunded actuarial accrued liability	647,067	2,249,299
Tier 1/ Tier 2 Funded status	98%	93%
Combined valuation payroll	$5,612,190	$5,795,860
Tier 1/Tier 2 UAL as a percentage of payroll	12%	39%
Tier 1/Tier 2 UAL rate	0.59%	(0.29%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	42	52
Tier 1/Tier 2 dormant members	79	82
Tier 1/Tier 2 retirees and beneficiaries	185	174

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	5,612,190	5,795,860
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]	$4,768,157	$5,273,377
2. Employer reserves	14,942,600	13,802,516
3. Benefits in force reserve	10,603,411	9,003,849
4. Total market value of assets ***(1. + 2. + 3.)***	**$30,314,168**	**$28,079,743**

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	$28,079,743
2. Regular employer contributions	353,085
3. Benefit payments and expense	(1,641,452)
4. Adjustments [2]	(404,333)
5. Interest credited	3,927,125
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$30,314,168**

[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	$42,745	$75,552
Tier 1 General Service	109,432	142,350
Tier 2 Police & Fire	53,604	68,928
Tier 2 General Service	106,242	111,464
Total	**$312,023**	**$398,294**

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	$312,023	$312,023	$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	$1,096,554	$1,485,943
▪ Tier 1 General Service	5,406,504	6,017,912
▪ Tier 2 Police & Fire	1,349,503	1,449,263
▪ Tier 2 General Service	2,656,127	2,563,369
▪ **Total Active Members**	**$10,508,688**	**$11,516,487**
Dormant Members	3,360,222	3,639,826
Retired Members and Beneficiaries	17,092,325	15,172,729
Total Actuarial Accrued Liability	**$30,961,235**	**$30,329,042**

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	$30,961,235	$30,961,235	$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	$30,961,235	$30,329,042
2. Actuarial value of assets	30,314,168	28,079,743
3. Unfunded accrued liability *(1. – 2.)*	647,067	2,249,299
4. Funded percentage *(2. ÷ 1.)*	98%	93%
5. Combined valuation payroll	$5,612,190	$5,795,860
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	12%	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	$647,067	$46,835
Total				**$647,067**	**$46,835**

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	$30,329,042
b. Normal cost at December 31, 2012	398,294
c. Benefit payments during 2013	(1,628,433)
d. Interest at 7.75% to December 31, 2013	2,318,267
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	31,417,170
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.)*	31,417,170
2. Actuarial accrued liability at December 31, 2013	30,961,235
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	455,935
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	28,079,743
b. Contributions for 2013[1]	353,085
c. Benefit payments and expenses during 2013	(1,641,452)
d. Interest at 7.75% to December 31, 2013	2,126,256
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	28,917,631
5. Actuarial value of assets at December 31, 2013	30,314,168
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	1,396,537
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$1,852,472**

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	**$2,249,299**
2. Expected increase	250,240
3. Liability (gain)/loss	(455,935)
4. Asset (gain)/loss	(1,396,537)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$647,067**

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	$42,745	$208,764	20.48%	$75,552	$311,930	24.22%
Tier 1 General Service	109,432	703,008	15.57%	142,350	835,986	17.03%
Tier 2 Police & Fire	53,604	327,247	16.38%	68,928	445,707	15.46%
Tier 2 General Service	106,242	915,952	11.60%	111,464	998,735	11.16%
Total	**$312,023**	**$2,154,971**	**14.48%**	**$398,294**	**$2,592,358**	**15.36%**

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	$647,067	$2,249,299
2. Next year's Tier 1/Tier 2 UAL payment	46,835	162,804
3. Combined valuation payroll	5,612,190	5,795,860
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.83%	2.81%

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	14.48%	15.36%
b. Tier 1/Tier 2 UAL rate	0.83%	2.81%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.46%	18.30%

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	12.07%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	12.07%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.41%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	98%
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%)*	9.07%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	15.07%
7. July 1, 2015 total pension rate, before adjustment	15.46%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.39%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.83%
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	15.07%
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	14.48%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.48%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	15.07%

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	14.48%	15.36%
b. Tier 1/Tier 2 UAL rate	0.44%	(0.42%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	15.07%	15.07%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$703,008	$208,764	$911,772
Tier 2	915,952	327,247	1,243,199
Tier 1/Tier 2 valuation payroll	1,618,960	536,011	2,154,971
OPSRP valuation payroll	2,319,193	1,138,026	3,457,219
Combined valuation payroll	**$3,938,153**	**$1,674,037**	**$5,612,190**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	13	21	50	84	16	23	51	90
Police & Fire	3	5	24	32	6	7	22	35
Total	16	26	74	116	22	30	73	125
Active Members with previous service segments with the employer								
General Service	33	29	N/A	62	31	27	N/A	58
Police & Fire	8	15	N/A	23	10	11	N/A	21
Total	41	44	N/A	85	41	38	N/A	79
Dormant Members								
General Service	26	41	9	76	32	41	7	80
Police & Fire	5	7	5	17	5	4	2	11
Total	31	48	14	93	37	45	9	91
Retired Members and Beneficiaries								
General Service	122	19	0	141	117	18	0	135
Police & Fire	41	3	0	44	34	5	0	39
Total	163	22	0	185	151	23	0	174
Grand Total Number of Members	**251**	**140**	**88**	**479**	**251**	**136**	**82**	**469**

[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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39			1	1						2
40-44			3	3	1					7
45-49			3	2						5
50-54			1	3	2	3	1			10
55-59			6	2	1					9
60-64			2	3		1				6
65-69			1	1						2
70-74			1							1
75+										
Total	0	0	18	15	4	4	1	0	0	42

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39	8	573
40-44	6	511
45-49	14	748
50-54	14	880
55-59	14	275
60-64	11	353
65-69	9	211
70-74	2	101
75+	1	212
Total	79	513

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	4	35
45-49	4	268
50-54	3	1,470
55-59	11	939
60-64	48	805
65-69	40	760
70-74	26	400
75-79	24	602
80-84	12	785
85-89	9	617
90-94	3	216
95-99	1	164
100+		
Total	185	679

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Keno Rural Fire Protection District/2646
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.

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.

Milliman

September 2014
Keno Rural Fire Protection District/2646

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Keno Rural Fire Protection District -- #2646

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Keno 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 Keno 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 Keno Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	16.37%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(2.05%)	(2.05%)	(2.05%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.93%**	**5.89%**	**10.00%**
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	**15.46%**	**6.34%**	**10.45%**

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 106%.

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	14.32%	14.32%
Minimum July 1, 2017 Rate	11.32%	8.32%
Maximum July 1, 2017 Rate	17.32%	20.32%

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	$439,513	$683,188	$243,675	64%	$136,382	179%
12/31/2009	536,346	605,171	68,825	89%	128,941	53%
12/31/2010	614,060	632,015	17,955	97%	117,841	15%
12/31/2011	648,686	725,949	77,263	89%	130,385	59%
12/31/2012	751,036	752,159	1,123	100%	105,208	1%
12/31/2013	881,486	829,968	(51,518)	106%	113,276	(45%)

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		
		OPSRP	
	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.

Keno Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($51,518)	$1,123
Allocated pooled OPSRP UAL	8,009	7,415
Side account	0	0
Net unfunded pension actuarial accrued liability	(43,509)	8,538
Combined valuation payroll	113,276	105,208
Net pension UAL as a percentage of payroll	(38%)	8%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,568	$2,207

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	$18,541	$17,462
Tier 1/Tier 2 valuation payroll	113,276	105,208
Tier 1/Tier 2 pension normal cost rate	16.37%	16.60%
Tier 1/ Tier 2 Actuarial accrued liability	$829,968	$752,159
Actuarial asset value	881,486	751,036
Tier 1/Tier 2 Unfunded actuarial accrued liability	(51,518)	1,123
Tier 1/ Tier 2 Funded status	106%	100%
Combined valuation payroll	$113,276	$105,208
Tier 1/Tier 2 UAL as a percentage of payroll	(45%)	1%
Tier 1/Tier 2 UAL rate	(2.05%)	0.21%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	113,276	105,208
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]	$193,958	$171,350
2. Employer reserves	641,707	535,978
3. Benefits in force reserve	45,821	43,708
4. Total market value of assets ***(1. + 2. + 3.)***	**$881,486**	**$751,036**

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	$751,036
2.	Regular employer contributions	19,255
3.	Benefit payments and expense	(7,093)
4.	Adjustments[2]	4,261
5.	Interest credited	114,027
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$881,486**

[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	$18,541	$17,462
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$18,541**	**$17,462**

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	$18,541	$18,541	$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	$752,243	$674,932
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	3,863	3,572
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$756,106**	**$678,504**
Dormant Members	0	0
Retired Members and Beneficiaries	73,862	73,655
Total Actuarial Accrued Liability	**$829,968**	**$752,159**

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	$829,968	$829,968	$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	$829,968	$752,159
2. Actuarial value of assets	881,486	751,036
3. Unfunded accrued liability *(1. – 2.)*	(51,518)	1,123
4. Funded percentage *(2. ÷ 1.)*	106%	100%
5. Combined valuation payroll	$113,276	$105,208
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(45%)	1%

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	($51,518)	($3,729)
Total				**($51,518)**	**($3,729)**

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	$752,159
b. Normal cost at December 31, 2012	17,462
c. Benefit payments during 2013	(7,037)
d. Interest at 7.75% to December 31, 2013	59,373
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	821,957
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.)*	821,957
2. Actuarial accrued liability at December 31, 2013	829,968
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(8,011)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	751,036
b. Contributions for 2013[1]	19,255
c. Benefit payments and expenses during 2013	(7,093)
d. Interest at 7.75% to December 31, 2013	58,677
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	821,875
5. Actuarial value of assets at December 31, 2013	881,486
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	59,611
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$51,600**

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	**$1,123**
2. Expected increase	(1,041)
3. Liability (gain)/loss	8,011
4. Asset (gain)/loss	(59,611)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($51,518)**

[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	$18,541	$113,276	16.37%	$17,462	$105,208	16.60%
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	**$18,541**	**$113,276**	**16.37%**	**$17,462**	**$105,208**	**16.60%**

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	($51,518)	$1,123
2. Next year's Tier 1/Tier 2 UAL payment	(3,729)	81
3. Combined valuation payroll	113,276	105,208
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(3.29%)	0.08%

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	16.37%	16.60%
b. Tier 1/Tier 2 UAL rate	(3.29%)	0.08%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.23%	16.81%

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	17.90%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	17.90%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.58%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.58%
c. Funded percentage	106%
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.)*	3.58%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	14.32%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	21.48%
7. July 1, 2015 total pension rate, before adjustment	13.23%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	1.09%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.29%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(2.20%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	14.32%
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	16.37%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	16.37%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	14.32%

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	16.37%	16.60%
b. Tier 1/Tier 2 UAL rate	(2.20%)	0.08%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	14.32%	16.81%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$113,276	$113,276
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	113,276	113,276
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$0**	**$113,276**	**$113,276**

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	0	0	1	1	0	0	1
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	1	4	N/A	5	0	0	N/A	0
Total	1	4	N/A	5	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	1	1	0	2	1	1	0	2
Total	2	1	0	3	2	1	0	3
Grand Total Number of Members	**4**	**5**	**0**	**9**	**3**	**1**	**0**	**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 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	441
60-64	1	1
65-69		
70-74	1	24
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	3	155

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Klamath County Fire District #1/2515
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.

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.

Milliman

September 2014
Klamath County Fire District #1/2515

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Klamath County Fire District #1 -- #2515

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Klamath County Fire District #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 Klamath County Fire District #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 Klamath County Fire District #1

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.17%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	4.13%	4.13%	4.13%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**21.91%**	**12.07%**	**16.18%**
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	**22.44%**	**12.52%**	**16.63%**

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 86%.

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	21.30%	21.30%
Minimum July 1, 2017 Rate	17.04%	12.78%
Maximum July 1, 2017 Rate	25.56%	29.82%

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	$23,454,496	$30,574,334	$7,119,838	77%	$5,670,098	126%
12/31/2009	26,521,815	33,357,196	6,835,381	80%	5,647,736	121%
12/31/2010	28,009,421	33,417,879	5,408,458	84%	5,205,087	104%
12/31/2011	27,401,974	35,883,765	8,481,791	76%	5,209,949	163%
12/31/2012	30,046,017	37,192,655	7,146,638	81%	5,617,966	127%
12/31/2013	32,664,639	37,839,742	5,175,103	86%	4,890,407	106%

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		
		OPSRP	
	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.

Klamath County Fire District #1

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$5,175,103	$7,146,638
Allocated pooled OPSRP UAL	345,782	395,970
Side account	0	0
Net unfunded pension actuarial accrued liability	5,520,885	7,542,608
Combined valuation payroll	4,890,407	5,617,966
Net pension UAL as a percentage of payroll	113%	134%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$67,688	$117,867

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	$481,724	$574,776
Tier 1/Tier 2 valuation payroll	2,805,950	3,373,668
Tier 1/Tier 2 pension normal cost rate	17.17%	17.04%
Tier 1/ Tier 2 Actuarial accrued liability	$37,839,742	$37,192,655
Actuarial asset value	32,664,639	30,046,017
Tier 1/Tier 2 Unfunded actuarial accrued liability	5,175,103	7,146,638
Tier 1/ Tier 2 Funded status	86%	81%
Combined valuation payroll	$4,890,407	$5,617,966
Tier 1/Tier 2 UAL as a percentage of payroll	106%	127%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	4.13%	4.26%
Tier 1/Tier 2 active members [1]	30	33
Tier 1/Tier 2 dormant members	3	4
Tier 1/Tier 2 retirees and beneficiaries	72	68

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	4,890,407	5,617,966
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]	$3,432,339	$3,900,046
2. Employer reserves	13,828,000	13,380,320
3. Benefits in force reserve	15,404,300	12,765,651
4. Total market value of assets *(1. + 2. + 3.)*	**$32,664,639**	**$30,046,017**

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	$30,046,017
2. Regular employer contributions	543,977
3. Benefit payments and expense	(2,384,650)
4. Adjustments [2]	133,240
5. Interest credited	4,326,056
6. Total transferred from side accounts	0
7. Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)*	**$32,664,639**

[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	$285,654	$354,317
Tier 1 General Service	0	0
Tier 2 Police & Fire	185,804	210,110
Tier 2 General Service	10,266	10,349
Total	**$481,724**	**$574,776**

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	$481,724	$481,724	$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	$9,006,948	$11,039,293
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	3,551,542	3,647,407
▪ Tier 2 General Service	148,498	137,371
▪ **Total Active Members**	**$12,706,988**	**$14,824,071**
Dormant Members	301,563	856,699
Retired Members and Beneficiaries	24,831,191	21,511,885
Total Actuarial Accrued Liability	**$37,839,742**	**$37,192,655**

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	$37,839,742	$37,839,742	$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	$37,839,742	$37,192,655
2. Actuarial value of assets	32,664,639	30,046,017
3. Unfunded accrued liability *(1. – 2.)*	5,175,103	7,146,638
4. Funded percentage *(2. ÷ 1.)*	86%	81%
5. Combined valuation payroll	$4,890,407	$5,617,966
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	106%	127%

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	$5,175,103	$374,573
Total				**$5,175,103**	**$374,573**

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	$37,192,655
b. Normal cost at December 31, 2012	574,776
c. Benefit payments during 2013	(2,365,736)
d. Interest at 7.75% to December 31, 2013	2,835,304
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	38,236,999
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.)*	38,236,999
2. Actuarial accrued liability at December 31, 2013	37,839,742
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	397,257
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	30,046,017
b. Contributions for 2013[1]	543,977
c. Benefit payments and expenses during 2013	(2,384,650)
d. Interest at 7.75% to December 31, 2013	2,257,240
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	30,462,584
5. Actuarial value of assets at December 31, 2013	32,664,639
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	2,202,055
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$2,599,312**

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	**$7,146,638**
2. Expected increase	627,777
3. Liability (gain)/loss	(397,257)
4. Asset (gain)/loss	(2,202,055)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$5,175,103**

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	$285,654	$1,516,366	18.84%	$354,317	$1,924,381	18.41%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	185,804	1,166,196	15.93%	210,110	1,330,306	15.79%
Tier 2 General Service	10,266	123,388	8.32%	10,349	118,981	8.70%
Total	**$481,724**	**$2,805,950**	**17.17%**	**$574,776**	**$3,373,668**	**17.04%**

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	$5,175,103	$7,146,638
2. Next year's Tier 1/Tier 2 UAL payment	374,573	517,273
3. Combined valuation payroll	4,890,407	5,617,966
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	7.66%	9.21%

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	17.17%	17.04%
b. Tier 1/Tier 2 UAL rate	7.66%	9.21%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	24.98%	26.38%

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	17.75%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	17.75%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.55%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.55%
c. Funded percentage	86%
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.)*	3.55%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	14.20%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	21.30%
7. July 1, 2015 total pension rate, before adjustment	24.98%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(3.68%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	7.66%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	3.98%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	21.30%
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	17.17%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.17%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	21.30%

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	17.17%	17.04%
b. Tier 1/Tier 2 UAL rate	3.98%	4.13%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	21.30%	21.30%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$1,516,366	$1,516,366
Tier 2	123,388	1,166,196	1,289,584
Tier 1/Tier 2 valuation payroll	123,388	2,682,562	2,805,950
OPSRP valuation payroll	79,157	2,005,300	2,084,457
Combined valuation payroll	**$202,545**	**$4,687,862**	**$4,890,407**

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	2	4	0	2	2	4
Police & Fire	15	13	25	53	18	13	22	53
Total	15	15	27	57	18	15	24	57
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	3	10	N/A	13	4	5	N/A	9
Total	3	10	N/A	13	4	5	N/A	9
Dormant Members								
General Service	0	1	1	2	0	1	1	2
Police & Fire	1	1	1	3	2	1	1	4
Total	1	2	2	5	2	2	2	6
Retired Members and Beneficiaries								
General Service	6	0	0	6	6	0	0	6
Police & Fire	61	5	1	67	54	8	0	62
Total	67	5	1	73	60	8	0	68
Grand Total Number of Members	**86**	**32**	**30**	**148**	**84**	**30**	**26**	**140**

[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	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
	Years of Service									
<20										
20-24										
25-29										
30-34										
35-39			3	1						4
40-44			5	1	1					7
45-49			1	2	2	1				6
50-54			2		3	1				6
55-59			3			2	1			6
60-64						1				1
65-69										
70-74										
75+										
Total	0	0	14	4	6	5	1	0	0	30

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49	1	560
50-54		
55-59	1	1,226
60-64	1	418
65-69		
70-74		
75+		
Total	3	735

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	3	177
55-59	18	3,051
60-64	16	2,978
65-69	17	2,861
70-74	5	1,100
75-79	4	229
80-84	3	2,128
85-89	3	439
90-94	3	503
95-99		
100+		
Total	72	2,324

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Knappa Svensen Burnside Rural Fire Protection District/2760
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.

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
Knappa Svensen Burnside Rural Fire Protection District/2760

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Knappa Svensen Burnside Rural Fire Protection District -- #276

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Knappa Svensen Burnside 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 Knappa Svensen Burnside 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 Knappa Svensen Burnside Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.31%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(5.95%)	(5.95%)	(5.95%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**11.97%**	**1.99%**	**6.10%**
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	**12.50%**	**2.44%**	**6.55%**

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 105%.

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	11.36%	11.36%
Minimum July 1, 2017 Rate	8.36%	5.36%
Maximum July 1, 2017 Rate	14.36%	17.36%

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	$239,076	$258,258	$19,182	93%	$67,070	29%
12/31/2009	281,947	266,881	(15,066)	106%	71,483	(21%)
12/31/2010	314,770	288,809	(25,961)	109%	72,007	(36%)
12/31/2011	331,085	326,025	(5,060)	102%	78,399	(6%)
12/31/2012	385,794	376,481	(9,313)	102%	83,896	(11%)
12/31/2013	446,356	423,729	(22,627)	105%	87,524	(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		
		OPSRP	
	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.

Knappa Svensen Burnside Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($22,627)	($9,313)
Allocated pooled OPSRP UAL	6,188	5,913
Side account	0	0
Net unfunded pension actuarial accrued liability	(16,439)	(3,400)
Combined valuation payroll	87,524	83,896
Net pension UAL as a percentage of payroll	(19%)	(4%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,211	$1,760

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	$15,150	$14,630
Tier 1/Tier 2 valuation payroll	87,524	83,896
Tier 1/Tier 2 pension normal cost rate	17.31%	17.44%
Tier 1/ Tier 2 Actuarial accrued liability	$423,729	$376,481
Actuarial asset value	446,356	385,794
Tier 1/Tier 2 Unfunded actuarial accrued liability	(22,627)	(9,313)
Tier 1/ Tier 2 Funded status	105%	102%
Combined valuation payroll	$87,524	$83,896
Tier 1/Tier 2 UAL as a percentage of payroll	(26%)	(11%)
Tier 1/Tier 2 UAL rate	(5.95%)	(6.08%)
(includes Multnomah Fire District #10)		
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	87,524	83,896
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]	$125,550	$115,591
2. Employer reserves	320,806	270,203
3. Benefits in force reserve	0	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$446,356**	**$385,794**

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	$385,794
2.	Regular employer contributions	7,404
3.	Benefit payments and expense	0
4.	Adjustments[2]	712
5.	Interest credited	52,446
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$446,356**

[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	$15,150	$14,630
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$15,150**	**$14,630**

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	$15,150	$15,150	$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	$423,729	$376,481
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$423,729**	**$376,481**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$423,729**	**$376,481**

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	$423,729	$423,729	$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	$423,729	$376,481
2. Actuarial value of assets	446,356	385,794
3. Unfunded accrued liability *(1. – 2.)*	(22,627)	(9,313)
4. Funded percentage *(2. ÷ 1.)*	105%	102%
5. Combined valuation payroll	$87,524	$83,896
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(26%)	(11%)

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	($22,627)	($1,638)
Total				**($22,627)**	**($1,638)**

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	$376,481
b. Normal cost at December 31, 2012	14,630
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	30,311
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	421,422
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.)*	421,422
2. Actuarial accrued liability at December 31, 2013	423,729
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(2,307)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	385,794
b. Contributions for 2013[1]	7,404
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	30,186
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	423,384
5. Actuarial value of assets at December 31, 2013	446,356
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	22,972
7. Total actuarial gain/(loss) *(3. + 6.)*	**$20,665**

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	**($9,313)**
2. Expected increase	7,351
3. Liability (gain)/loss	2,307
4. Asset (gain)/loss	(22,972)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($22,627)**

[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	$15,150	$87,524	17.31%	$14,630	$83,896	17.44%
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	**$15,150**	**$87,524**	**17.31%**	**$14,630**	**$83,896**	**17.44%**

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	($22,627)	($9,313)
2. Next year's Tier 1/Tier 2 UAL payment	(1,638)	(674)
3. Combined valuation payroll	87,524	83,896
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(1.87%)	(0.80%)

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	17.31%	17.44%
b. Tier 1/Tier 2 UAL rate	(1.87%)	(0.80%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.59%	16.77%

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	8.36%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	8.36%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.67%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	105%
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%)*	5.36%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.36%
7. July 1, 2015 total pension rate, before adjustment	15.59%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(4.23%)
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.)*	(6.10%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.36%
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	17.31%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.31%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	11.36%

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	17.31%	17.44%
b. Tier 1/Tier 2 UAL rate	(6.10%)	(6.21%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	11.36%	11.36%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$87,524	$87,524
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	87,524	87,524
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$0**	**$87,524**	**$87,524**

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	0	0	1	1	0	0	1
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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Lakeside Water District/2644
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
Lakeside Water District/2644

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
Lakeside Water District/2644

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Lakeside Water District -- #2644

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Lakeside Water 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 Lakeside Water 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 Lakeside Water District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	10.02%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	2.19%	2.19%	2.19%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.82%**	**10.13%**	**14.24%**
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	**13.35%**	**10.58%**	**14.69%**

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	12.21%	12.21%
Minimum July 1, 2017 Rate	9.21%	6.21%
Maximum July 1, 2017 Rate	15.21%	18.21%

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	$409,070	$584,065	$174,995	70%	$125,013	140%
12/31/2009	460,495	583,881	123,386	79%	88,065	140%
12/31/2010	486,366	620,803	134,437	78%	113,608	118%
12/31/2011	476,386	632,094	155,708	75%	148,317	105%
12/31/2012	489,340	572,638	83,298	85%	150,540	55%
12/31/2013	559,083	602,151	43,068	93%	153,024	28%

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		
		OPSRP	
	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.

Lakeside Water District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$43,068	$83,298
Allocated pooled OPSRP UAL	10,820	10,610
Side account	0	0
Net unfunded pension actuarial accrued liability	53,888	93,908
Combined valuation payroll	153,024	150,540
Net pension UAL as a percentage of payroll	35%	62%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,118	$3,158

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	$7,370	$7,234
Tier 1/Tier 2 valuation payroll	73,533	73,109
Tier 1/Tier 2 pension normal cost rate	10.02%	9.89%
Tier 1/ Tier 2 Actuarial accrued liability	$602,151	$572,638
Actuarial asset value	559,083	489,340
Tier 1/Tier 2 Unfunded actuarial accrued liability	43,068	83,298
Tier 1/ Tier 2 Funded status	93%	85%
Combined valuation payroll	$153,024	$150,540
Tier 1/Tier 2 UAL as a percentage of payroll	28%	55%
Tier 1/Tier 2 UAL rate	2.19%	4.13%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	3	3
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	153,024	150,540
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]	$58,808	$48,954
2. Employer reserves	278,453	228,978
3. Benefits in force reserve	221,822	211,408
4. Total market value of assets *(1. + 2. + 3.)*	**$559,083**	**$489,340**

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	$489,340
2.	Regular employer contributions	12,038
3.	Benefit payments and expense	(34,339)
4.	Adjustments [2]	15,167
5.	Interest credited	76,876
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$559,083**

[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	7,370	7,234
Total	**$7,370**	**$7,234**

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	$7,370	$7,370	$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	154,535	139,907
▪ **Total Active Members**	**$154,535**	**$139,907**
Dormant Members	90,047	76,479
Retired Members and Beneficiaries	357,569	356,252
Total Actuarial Accrued Liability	**$602,151**	**$572,638**

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	$602,151	$602,151	$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	$602,151	$572,638
2. Actuarial value of assets	559,083	489,340
3. Unfunded accrued liability *(1. – 2.)*	43,068	83,298
4. Funded percentage *(2. ÷ 1.)*	93%	85%
5. Combined valuation payroll	$153,024	$150,540
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	28%	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	$43,068	$3,117
Total				**$43,068**	**$3,117**

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	$572,638
b. Normal cost at December 31, 2012	7,234
c. Benefit payments during 2013	(34,067)
d. Interest at 7.75% to December 31, 2013	43,620
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	589,425
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.)*	589,425
2. Actuarial accrued liability at December 31, 2013	602,151
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(12,726)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	489,340
b. Contributions for 2013[1]	12,038
c. Benefit payments and expenses during 2013	(34,339)
d. Interest at 7.75% to December 31, 2013	37,060
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	504,099
5. Actuarial value of assets at December 31, 2013	559,083
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	54,984
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$42,258**

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	**$83,298**
2. Expected increase	2,028
3. Liability (gain)/loss	12,726
4. Asset (gain)/loss	(54,984)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$43,068**

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	7,370	73,533	10.02%	7,234	73,109	9.89%
Total	**$7,370**	**$73,533**	**10.02%**	**$7,234**	**$73,109**	**9.89%**

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	$43,068	$83,298
2. Next year's Tier 1/Tier 2 UAL payment	3,117	6,029
3. Combined valuation payroll	153,024	150,540
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.04%	4.00%

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	10.02%	9.89%
b. Tier 1/Tier 2 UAL rate	2.04%	4.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	12.21%	14.02%

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	13.31%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.31%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.66%
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%)*	10.31%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	16.31%
7. July 1, 2015 total pension rate, before adjustment	12.21%
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	2.04%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	2.04%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.21%
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	10.02%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	10.02%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	12.21%

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	10.02%	9.89%
b. Tier 1/Tier 2 UAL rate	2.04%	4.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	12.21%	14.02%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	73,533	0	73,533
Tier 1/Tier 2 valuation payroll	73,533	0	73,533
OPSRP valuation payroll	79,491	0	79,491
Combined valuation payroll	**$153,024**	**$0**	**$153,024**

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	2	3	0	1	2	3
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	2	3	0	1	2	3
Active Members with previous service segments with the employer								
General Service	0	1	N/A	1	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	1	N/A	1	0	0	N/A	0
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	5	0	0	5	5	0	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	5	0	0	5	5	0	0	5
Grand Total Number of Members	**5**	**5**	**2**	**12**	**5**	**4**	**2**	**11**

[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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54	1	1,285
55-59	2	4
60-64		
65-69		
70-74		
75+		
Total	3	431

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	1	160
65-69	2	446
70-74	1	413
75-79	1	1,218
80-84		
85-89		
90-94		
95-99		
100+		
Total	5	537

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Lane County/2008
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
Lane County/2008

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.

Milliman

September 2014
Lane County/2008

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Lane County -- #2008

September 2014

Secondary Employers

2047 Lane County Fair Board

CONTENTS

Executive Summary

Milliman has prepared this report for Lane 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 Lane 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 Lane County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.85%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.12%	0.12%	0.12%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.58%**	**8.06%**	**12.17%**
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	**15.11%**	**8.51%**	**12.62%**

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 95%.

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	13.97%	13.97%
Minimum July 1, 2017 Rate	10.97%	7.97%
Maximum July 1, 2017 Rate	16.97%	19.97%

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	$446,608,724	$559,238,374	$112,629,650	80%	$73,699,021	153%
12/31/2009	500,408,457	583,156,954	82,748,497	86%	76,335,867	108%
12/31/2010	530,061,782	608,521,838	78,460,056	87%	82,587,626	95%
12/31/2011	511,461,459	623,549,175	112,087,716	82%	81,017,355	138%
12/31/2012	550,497,247	610,507,495	60,010,248	90%	75,072,561	80%
12/31/2013	597,410,846	627,518,523	30,107,676	95%	73,750,639	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		
		OPSRP	
	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.

Lane County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$30,107,676	$60,010,248
Allocated pooled OPSRP UAL	5,214,619	5,291,321
Side account	0	0
Net unfunded pension actuarial accrued liability	35,322,295	65,301,569
Combined valuation payroll	73,750,639	75,072,561
Net pension UAL as a percentage of payroll	48%	87%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,020,788	$1,575,054

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	$6,295,854	$6,851,447
Tier 1/Tier 2 valuation payroll	45,464,174	49,255,083
Tier 1/Tier 2 pension normal cost rate	13.85%	13.91%
Tier 1/ Tier 2 Actuarial accrued liability	$627,518,523	$610,507,495
Actuarial asset value	597,410,847	550,497,247
Tier 1/Tier 2 Unfunded actuarial accrued liability	30,107,676	60,010,248
Tier 1/ Tier 2 Funded status	95%	90%
Combined valuation payroll	$73,750,639	$75,072,561
Tier 1/Tier 2 UAL as a percentage of payroll	41%	80%
Tier 1/Tier 2 UAL rate	0.12%	0.06%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	660	727
Tier 1/Tier 2 dormant members	351	386
Tier 1/Tier 2 retirees and beneficiaries	1,935	1,840

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	73,750,639	75,072,561
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]	$62,724,452	$67,549,605
2. Employer reserves	264,130,120	239,297,199
3. Benefits in force reserve	270,556,274	243,650,443
4. Total market value of assets ***(1. + 2. + 3.)***	**$597,410,847**	**$550,497,247**

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	$550,497,247
2.	Regular employer contributions	5,881,697
3.	Benefit payments and expense	(41,883,246)
4.	Adjustments[2]	3,955,004
5.	Interest credited	78,960,144
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$597,410,847**

[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	$816,851	$951,258
Tier 1 General Service	2,468,037	2,760,006
Tier 2 Police & Fire	1,151,601	1,173,218
Tier 2 General Service	1,859,365	1,966,965
Total	**$6,295,854**	**$6,851,447**

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	$6,295,854	$6,295,854	$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	$24,865,716	$27,048,891
▪ Tier 1 General Service	72,589,432	78,387,965
▪ Tier 2 Police & Fire	20,613,996	19,263,308
▪ Tier 2 General Service	36,676,284	34,996,713
▪ **Total Active Members**	**$154,745,428**	**$159,696,877**
Dormant Members	36,645,888	40,225,976
Retired Members and Beneficiaries	436,127,207	410,584,642
Total Actuarial Accrued Liability	**$627,518,523**	**$610,507,495**

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	$627,518,523	$627,518,523	$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	$627,518,523	$610,507,495
2. Actuarial value of assets	597,410,847	550,497,247
3. Unfunded accrued liability *(1. – 2.)*	30,107,676	60,010,248
4. Funded percentage *(2. ÷ 1.)*	95%	90%
5. Combined valuation payroll	$73,750,639	$75,072,561
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	41%	80%

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	$30,107,676	$2,179,189
Total				**$30,107,676**	**$2,179,189**

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	$610,507,495
b. Normal cost at December 31, 2012	6,851,447
c. Benefit payments during 2013	(41,551,043)
d. Interest at 7.75% to December 31, 2013	46,235,215
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	622,043,114
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.)*	622,043,114
2. Actuarial accrued liability at December 31, 2013	627,518,523
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(5,475,409)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	550,497,247
b. Contributions for 2013[1]	5,881,697
c. Benefit payments and expenses during 2013	(41,883,246)
d. Interest at 7.75% to December 31, 2013	41,268,477
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	555,764,175
5. Actuarial value of assets at December 31, 2013	597,410,847
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	41,646,672
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$36,171,263**

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	**$60,010,248**
2. Expected increase	6,268,691
3. Liability (gain)/loss	5,475,409
4. Asset (gain)/loss	(41,646,672)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$30,107,676**

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	$816,851	$4,680,017	17.45%	$951,258	$5,307,131	17.92%
Tier 1 General Service	2,468,037	15,628,447	15.79%	2,760,006	17,679,664	15.61%
Tier 2 Police & Fire	1,151,601	7,711,191	14.93%	1,173,218	7,861,900	14.92%
Tier 2 General Service	1,859,365	17,444,519	10.66%	1,966,965	18,406,388	10.69%
Total	**$6,295,854**	**$45,464,174**	**13.85%**	**$6,851,447**	**$49,255,083**	**13.91%**

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	$30,107,676	$60,010,248
2. Next year's Tier 1/Tier 2 UAL payment	2,179,189	4,343,533
3. Combined valuation payroll	73,750,639	75,072,561
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.95%	5.79%

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	13.85%	13.91%
b. Tier 1/Tier 2 UAL rate	2.95%	5.79%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	16.95%	19.83%

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	10.97%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.97%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.19%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	95%
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%)*	7.97%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.97%
7. July 1, 2015 total pension rate, before adjustment	16.95%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.98%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	2.95%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.03%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.97%
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	13.85%
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.)*	13.97%

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%	13.91%
b. Tier 1/Tier 2 UAL rate	(0.03%)	(0.07%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	13.97%	13.97%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$15,628,447	$4,680,017	$20,308,464
Tier 2	17,444,519	7,711,191	25,155,710
Tier 1/Tier 2 valuation payroll	33,072,966	12,391,208	45,464,174
OPSRP valuation payroll	26,209,334	2,077,131	28,286,465
Combined valuation payroll	**$59,282,300**	**$14,468,339**	**$73,750,639**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	228	287	507	1,022	255	310	471	1,036
Police & Fire	49	96	34	179	61	101	28	190
Total	277	383	541	1,201	316	411	499	1,226
Active Members with previous service segments with the employer								
General Service	157	138	N/A	295	137	102	N/A	239
Police & Fire	14	32	N/A	46	13	28	N/A	41
Total	171	170	N/A	341	150	130	N/A	280
Dormant Members								
General Service	175	145	50	370	211	147	34	392
Police & Fire	17	14	6	37	15	13	9	37
Total	192	159	56	407	226	160	43	429
Retired Members and Beneficiaries								
General Service	1,586	78	13	1,677	1,493	88	11	1,592
Police & Fire	258	13	2	273	242	17	1	260
Total	1,844	91	15	1,950	1,735	105	12	1,852
Grand Total Number of Members	**2,484**	**803**	**612**	**3,899**	**2,427**	**806**	**554**	**3,787**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34			6							**6**
35-39		3	44	6						**53**
40-44		3	59	29	3					**94**
45-49		4	47	21	23	10				**105**
50-54		1	51	33	29	27	1			**142**
55-59	1	4	42	42	28	28	5	1		**151**
60-64			21	29	16	13	4	1		**84**
65-69			8	9	1	3				**21**
70-74		1	2	1						**4**
75+										
Total	**1**	**16**	**280**	**170**	**100**	**81**	**10**	**2**	**0**	**660**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34	7	188
35-39	13	757
40-44	43	948
45-49	44	1,501
50-54	70	1,374
55-59	66	928
60-64	62	1,139
65-69	33	668
70-74	5	884
75+	8	777
Total	351	1,079

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	16	1,169
45-49	12	2,169
50-54	29	2,108
55-59	135	2,057
60-64	446	1,770
65-69	528	1,946
70-74	298	1,655
75-79	211	1,388
80-84	132	1,219
85-89	70	1,089
90-94	45	743
95-99	12	331
100+	1	454
Total	1,935	1,686

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

League of Oregon Cities/2521
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
League of Oregon Cities/2521

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
League of Oregon Cities/2521

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

League of Oregon Cities -- #2521

September 2014

Secondary Employers

2693	City/County Insurance Services
2738	Employes Benefit Services Trust

CONTENTS

Executive Summary

Milliman has prepared this report for League of Oregon Cities 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 League of Oregon Cities.

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 League of Oregon Cities

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	10.63%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	2.96%	2.96%	2.96%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.20%**	**10.90%**	**15.01%**
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	**14.73%**	**11.35%**	**15.46%**

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

1 *Includes Multnomah Fire District #10 rate.*

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 84%.

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	13.59%	13.59%
Minimum July 1, 2017 Rate	10.59%	7.59%
Maximum July 1, 2017 Rate	16.59%	19.59%

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	$10,276,038	$13,452,837	$3,176,799	76%	$5,309,971	60%
12/31/2009	11,310,015	14,190,669	2,880,654	80%	5,344,096	54%
12/31/2010	12,001,208	14,979,241	2,978,033	80%	5,910,498	50%
12/31/2011	11,873,512	15,628,011	3,754,499	76%	6,154,733	61%
12/31/2012	12,998,627	16,022,753	3,024,126	81%	6,322,166	48%
12/31/2013	14,118,834	16,767,448	2,648,614	84%	6,364,078	42%

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		
		OPSRP	
	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.

League of Oregon Cities

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$2,648,614	$3,024,126
Allocated pooled OPSRP UAL	449,979	445,604
Side account	0	0
Net unfunded pension actuarial accrued liability	3,098,593	3,469,730
Combined valuation payroll	6,364,078	6,322,166
Net pension UAL as a percentage of payroll	49%	55%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$88,086	$132,642

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	$288,443	$324,585
Tier 1/Tier 2 valuation payroll	2,713,543	2,978,937
Tier 1/Tier 2 pension normal cost rate	10.63%	10.90%
Tier 1/ Tier 2 Actuarial accrued liability	$16,767,448	$16,022,753
Actuarial asset value	14,118,834	12,998,627
Tier 1/Tier 2 Unfunded actuarial accrued liability	2,648,614	3,024,126
Tier 1/ Tier 2 Funded status	84%	81%
Combined valuation payroll	$6,364,078	$6,322,166
Tier 1/Tier 2 UAL as a percentage of payroll	42%	48%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	2.96%	2.69%
Tier 1/Tier 2 active members [1]	27	30
Tier 1/Tier 2 dormant members	14	13
Tier 1/Tier 2 retirees and beneficiaries	41	37

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	6,364,078	6,322,166
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]	$1,617,981	$1,808,161
2. Employer reserves	5,993,306	5,741,345
3. Benefits in force reserve	6,507,547	5,449,121
4. Total market value of assets ***(1. + 2. + 3.)***	**$14,118,834**	**$12,998,627**

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	$12,998,627
2.	Regular employer contributions	357,763
3.	Benefit payments and expense	(1,007,396)
4.	Adjustments[2]	(108,047)
5.	Interest credited	1,877,886
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$14,118,834**

[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	126,139	151,726
Tier 2 Police & Fire	0	0
Tier 2 General Service	162,304	172,859
Total	**$288,443**	**$324,585**

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	$288,443	$288,443	$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	2,604,990	3,347,966
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	2,564,089	2,401,289
▪ **Total Active Members**	**$5,169,079**	**$5,749,255**
Dormant Members	1,108,431	1,090,976
Retired Members and Beneficiaries	10,489,938	9,182,522
Total Actuarial Accrued Liability	**$16,767,448**	**$16,022,753**

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	$16,767,448	$16,767,448	$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	$16,767,448	$16,022,753
2. Actuarial value of assets	14,118,834	12,998,627
3. Unfunded accrued liability *(1. – 2.)*	2,648,614	3,024,126
4. Funded percentage *(2. ÷ 1.)*	84%	81%
5. Combined valuation payroll	$6,364,078	$6,322,166
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	42%	48%

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	$2,648,614	$191,706
Total				**$2,648,614**	**$191,706**

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	$16,022,753
b. Normal cost at December 31, 2012	324,585
c. Benefit payments during 2013	(999,405)
d. Interest at 7.75% to December 31, 2013	1,228,192
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	16,576,125
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.)*	16,576,125
2. Actuarial accrued liability at December 31, 2013	16,767,448
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(191,323)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	12,998,627
b. Contributions for 2013[1]	357,763
c. Benefit payments and expenses during 2013	(1,007,396)
d. Interest at 7.75% to December 31, 2013	982,220
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	13,331,215
5. Actuarial value of assets at December 31, 2013	14,118,834
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	787,619
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$596,296**

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	**$3,024,126**
2. Expected increase	220,784
3. Liability (gain)/loss	191,323
4. Asset (gain)/loss	(787,619)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$2,648,614**

[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	126,139	1,123,456	11.23%	151,726	1,283,563	11.82%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	162,304	1,590,087	10.21%	172,859	1,695,374	10.20%
Total	**$288,443**	**$2,713,543**	**10.63%**	**$324,585**	**$2,978,937**	**10.90%**

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	$2,648,614	$3,024,126
2. Next year's Tier 1/Tier 2 UAL payment	191,706	218,886
3. Combined valuation payroll	6,364,078	6,322,166
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.01%	3.46%

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	10.63%	10.90%
b. Tier 1/Tier 2 UAL rate	3.01%	3.46%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.79%	14.49%

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	10.59%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.59%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.12%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	84%
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%)*	7.59%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.59%
7. July 1, 2015 total pension rate, before adjustment	13.79%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.20%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.01%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	2.81%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.59%
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	10.63%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	10.63%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.59%

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	10.63%	10.90%
b. Tier 1/Tier 2 UAL rate	2.81%	2.56%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	13.59%	13.59%
(a. + b. + c., minimum of 5.47%)		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$1,123,456	$0	$1,123,456
Tier 2	1,590,087	0	1,590,087
Tier 1/Tier 2 valuation payroll	2,713,543	0	2,713,543
OPSRP valuation payroll	3,650,535	0	3,650,535
Combined valuation payroll	**$6,364,078**	**$0**	**$6,364,078**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	11	16	46	73	12	18	45	75
Police & Fire	0	0	0	0	0	0	0	0
Total	11	16	46	73	12	18	45	75
Active Members with previous service segments with the employer								
General Service	4	8	N/A	12	3	1	N/A	4
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	4	8	N/A	12	3	1	N/A	4
Dormant Members								
General Service	7	7	5	19	6	7	4	17
Police & Fire	0	0	0	0	0	0	0	0
Total	7	7	5	19	6	7	4	17
Retired Members and Beneficiaries								
General Service	40	1	4	45	35	2	3	40
Police & Fire	0	0	0	0	0	0	0	0
Total	40	1	4	45	35	2	3	40
Grand Total Number of Members	**62**	**32**	**55**	**149**	**56**	**28**	**52**	**136**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34		1								**1**
35-39			3							**3**
40-44			2							**2**
45-49			3	2	1					**6**
50-54				1	2	1				**4**
55-59		1	1	3		1	1			**7**
60-64				2						**2**
65-69			2							**2**
70-74										
75+										
Total	**0**	**2**	**11**	**8**	**3**	**2**	**1**	**0**	**0**	**27**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39	2	1,482
40-44	2	1,132
45-49	3	982
50-54	1	146
55-59	3	1,118
60-64	2	545
65-69	1	1,646
70-74		
75+		
Total	14	1,029

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	2,025
55-59	2	1,388
60-64	7	1,684
65-69	15	2,631
70-74	9	1,472
75-79	3	357
80-84	3	2,823
85-89	1	607
90-94		
95-99		
100+		
Total	41	1,938

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Linn County/2014
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.

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.

Milliman

September 2014
Linn County/2014

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

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

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

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

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

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

Sincerely,

Matthew R. Larrabee, FSA, EA	Scott D. Preppernau, FSA, EA
Principal and Consulting Actuary	Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Linn County -- #2014

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Linn 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 Linn 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 Linn County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.61%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	3.21%	3.21%	3.21%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**18.43%**	**11.15%**	**15.26%**
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	**18.96%**	**11.60%**	**15.71%**

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 88%.

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	17.82%	17.82%
Minimum July 1, 2017 Rate	14.26%	10.70%
Maximum July 1, 2017 Rate	21.38%	24.94%

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	$119,192,057	$165,101,630	$45,909,573	72%	$30,606,529	150%
12/31/2009	135,458,576	173,289,627	37,831,051	78%	32,768,668	115%
12/31/2010	145,618,230	182,831,652	37,213,422	80%	34,453,366	108%
12/31/2011	144,346,411	184,066,697	39,720,286	78%	34,012,953	117%
12/31/2012	159,362,121	189,449,664	30,087,543	84%	34,115,995	88%
12/31/2013	175,224,089	199,169,091	23,945,002	88%	32,600,717	73%

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		
		OPSRP	
	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.

Linn County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$23,945,002	$30,087,543
Allocated pooled OPSRP UAL	2,305,069	2,404,589
Side account	0	0
Net unfunded pension actuarial accrued liability	26,250,071	32,492,132
Combined valuation payroll	32,600,717	34,115,995
Net pension UAL as a percentage of payroll	81%	95%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$451,229	$715,768

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	$3,077,044	$3,341,731
Tier 1/Tier 2 valuation payroll	21,055,562	22,990,030
Tier 1/Tier 2 pension normal cost rate	14.61%	14.54%
Tier 1/ Tier 2 Actuarial accrued liability	$199,169,091	$189,449,664
Actuarial asset value	175,224,089	159,362,121
Tier 1/Tier 2 Unfunded actuarial accrued liability	23,945,002	30,087,543
Tier 1/ Tier 2 Funded status	88%	84%
Combined valuation payroll	$32,600,717	$34,115,995
Tier 1/Tier 2 UAL as a percentage of payroll	73%	88%
Tier 1/Tier 2 UAL rate	3.21%	3.28%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	327	363
Tier 1/Tier 2 dormant members	170	180
Tier 1/Tier 2 retirees and beneficiaries	628	577

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	32,600,717	34,115,995
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]	$28,499,990	$30,553,292
2. Employer reserves	79,734,116	72,891,814
3. Benefits in force reserve	66,989,984	55,917,015
4. Total market value of assets ***(1. + 2. + 3.)***	**$175,224,089**	**$159,362,121**

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	$159,362,121
2. Regular employer contributions	4,023,833
3. Benefit payments and expense	(10,370,330)
4. Adjustments[2]	(852,717)
5. Interest credited	23,061,182
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$175,224,089**

[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	$548,266	$595,719
Tier 1 General Service	1,197,572	1,355,007
Tier 2 Police & Fire	548,915	503,338
Tier 2 General Service	782,291	887,667
Total	**$3,077,044**	**$3,341,731**

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	$3,077,044	$3,077,044	$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	$17,354,079	$18,267,333
▪ Tier 1 General Service	35,416,723	38,444,601
▪ Tier 2 Police & Fire	9,387,226	8,365,055
▪ Tier 2 General Service	15,929,271	15,884,878
▪ **Total Active Members**	**$78,087,299**	**$80,961,867**
Dormant Members	13,096,293	14,259,905
Retired Members and Beneficiaries	107,985,499	94,227,892
Total Actuarial Accrued Liability	**$199,169,091**	**$189,449,664**

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	$199,169,091	$199,169,091	$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	$199,169,091	$189,449,664
2. Actuarial value of assets	175,224,089	159,362,121
3. Unfunded accrued liability *(1. – 2.)*	23,945,002	30,087,543
4. Funded percentage *(2. ÷ 1.)*	88%	84%
5. Combined valuation payroll	$32,600,717	$34,115,995
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	73%	88%

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	$23,945,002	$1,733,136
Total				**$23,945,002**	**$1,733,136**

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	$189,449,664
b. Normal cost at December 31, 2012	3,341,731
c. Benefit payments during 2013	(10,288,076)
d. Interest at 7.75% to December 31, 2013	14,542,670
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	197,045,989
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.)*	197,045,989
2. Actuarial accrued liability at December 31, 2013	199,169,091
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(2,123,102)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	159,362,121
b. Contributions for 2013[1]	4,023,833
c. Benefit payments and expenses during 2013	(10,370,330)
d. Interest at 7.75% to December 31, 2013	12,104,638
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	165,120,262
5. Actuarial value of assets at December 31, 2013	175,224,089
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	10,103,828
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$7,980,726**

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	**$30,087,543**
2. Expected increase	1,838,185
3. Liability (gain)/loss	2,123,102
4. Asset (gain)/loss	(10,103,828)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$23,945,002**

[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	$548,266	$3,015,366	18.18%	$595,719	$3,275,079	18.19%
Tier 1 General Service	1,197,572	7,579,918	15.80%	1,355,007	8,602,774	15.75%
Tier 2 Police & Fire	548,915	3,441,789	15.95%	503,338	3,146,158	16.00%
Tier 2 General Service	782,291	7,018,489	11.15%	887,667	7,966,019	11.14%
Total	**$3,077,044**	**$21,055,562**	**14.61%**	**$3,341,731**	**$22,990,030**	**14.54%**

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	$23,945,002	$30,087,543
2. Next year's Tier 1/Tier 2 UAL payment	1,733,136	2,177,732
3. Combined valuation payroll	32,600,717	34,115,995
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	5.32%	6.38%

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	14.61%	14.54%
b. Tier 1/Tier 2 UAL rate	5.32%	6.38%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	20.08%	21.05%

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	14.82%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	14.82%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.96%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	88%
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%)*	11.82%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	17.82%
7. July 1, 2015 total pension rate, before adjustment	20.08%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.26%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	5.32%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	3.06%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	17.82%
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	14.61%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.61%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	17.82%

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	14.61%	14.54%
b. Tier 1/Tier 2 UAL rate	3.06%	3.15%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	17.82%	17.82%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$7,579,918	$3,015,366	$10,595,284
Tier 2	7,018,489	3,441,789	10,460,278
Tier 1/Tier 2 valuation payroll	14,598,407	6,457,155	21,055,562
OPSRP valuation payroll	9,135,938	2,409,217	11,545,155
Combined valuation payroll	**$23,734,345**	**$8,866,372**	**$32,600,717**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	118	125	211	454	136	142	207	485
Police & Fire	38	46	35	119	42	43	31	116
Total	156	171	246	573	178	185	238	601
Active Members with previous service segments with the employer								
General Service	84	96	N/A	180	63	63	N/A	126
Police & Fire	22	11	N/A	33	15	5	N/A	20
Total	106	107	N/A	213	78	68	N/A	146
Dormant Members								
General Service	65	85	34	184	77	84	17	178
Police & Fire	14	6	0	20	12	7	0	19
Total	79	91	34	204	89	91	17	197
Retired Members and Beneficiaries								
General Service	466	47	4	517	425	43	2	470
Police & Fire	109	6	1	116	103	6	1	110
Total	575	53	5	633	528	49	3	580
Grand Total Number of Members	**916**	**422**	**285**	**1,623**	**873**	**393**	**258**	**1,524**

[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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29		1	1							**2**
30-34		1	4							**5**
35-39		3	15	9						**27**
40-44		3	21	26	2					**52**
45-49			17	23	12	3				**55**
50-54		2	14	12	19	10				**57**
55-59		1	11	25	7	12	1	2		**59**
60-64		2	13	18	16	2	4	2		**57**
65-69			3	2	2	2	1			**10**
70-74			1	1		1				**3**
75+										
Total	**0**	**13**	**100**	**116**	**58**	**30**	**6**	**4**	**0**	**327**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29	1	218
30-34	3	62
35-39	9	759
40-44	20	715
45-49	24	1,197
50-54	38	816
55-59	35	560
60-64	20	1,312
65-69	15	1,241
70-74	3	231
75+	2	1,375
Total	170	877

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	2,350
45-49	2	1,455
50-54	9	1,438
55-59	47	1,448
60-64	127	1,757
65-69	161	1,168
70-74	111	1,308
75-79	78	987
80-84	44	1,136
85-89	29	1,145
90-94	13	944
95-99	6	829
100+		
Total	628	1,306

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Malheur County/2039
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.

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
Malheur County/2039

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Malheur County -- #2039

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Malheur 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 Malheur 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 Malheur County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.61%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(1.45%)	(1.45%)	(1.45%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**13.77%**	**6.49%**	**10.60%**
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	**14.30%**	**6.94%**	**11.05%**

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

1 *Includes Multnomah Fire District #10 rate.*

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	13.16%	13.16%
Minimum July 1, 2017 Rate	10.16%	7.16%
Maximum July 1, 2017 Rate	16.16%	19.16%

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	$26,929,480	$32,360,030	$5,430,550	83%	$7,410,989	73%
12/31/2009	30,796,030	34,090,448	3,294,418	90%	7,381,830	45%
12/31/2010	32,615,328	35,461,722	2,846,394	92%	7,631,723	37%
12/31/2011	32,516,737	37,111,809	4,595,072	88%	7,459,213	62%
12/31/2012	36,288,108	37,610,222	1,322,114	96%	7,739,628	17%
12/31/2013	40,424,622	38,745,745	(1,678,877)	104%	7,615,815	(22%)

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		
		OPSRP	
	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.

Malheur County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($1,678,877)	$1,322,114
Allocated pooled OPSRP UAL	538,484	545,510
Side account	0	0
Net unfunded pension actuarial accrued liability	(1,140,393)	1,867,624
Combined valuation payroll	7,615,815	7,739,628
Net pension UAL as a percentage of payroll	(15%)	24%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$105,411	$162,381

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	$671,648	$703,885
Tier 1/Tier 2 valuation payroll	4,596,005	4,891,962
Tier 1/Tier 2 pension normal cost rate	14.61%	14.39%
Tier 1/ Tier 2 Actuarial accrued liability	$38,745,745	$37,610,222
Actuarial asset value	40,424,622	36,288,108
Tier 1/Tier 2 Unfunded actuarial accrued liability	(1,678,877)	1,322,114
Tier 1/ Tier 2 Funded status	104%	96%
Combined valuation payroll	$7,615,815	$7,739,628
Tier 1/Tier 2 UAL as a percentage of payroll	(22%)	17%
Tier 1/Tier 2 UAL rate	(1.45%)	(0.49%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	92	102
Tier 1/Tier 2 dormant members	60	67
Tier 1/Tier 2 retirees and beneficiaries	166	156

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

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	7,615,815	7,739,628
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]	$7,500,360	$7,283,269
2. Employer reserves	22,459,904	19,339,861
3. Benefits in force reserve	10,464,358	9,664,979
4. Total market value of assets ***(1. + 2. + 3.)***	**$40,424,622**	**$36,288,108**

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	$36,288,108
2.	Regular employer contributions	542,950
3.	Benefit payments and expense	(1,619,926)
4.	Adjustments[2]	118,027
5.	Interest credited	5,095,464
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$40,424,622**

[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	$119,902	$126,110
Tier 1 General Service	225,071	231,036
Tier 2 Police & Fire	136,824	151,672
Tier 2 General Service	189,851	195,067
Total	**$671,648**	**$703,885**

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	$671,648	$671,648	$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	$3,522,946	$3,600,395
▪ Tier 1 General Service	7,725,656	7,694,677
▪ Tier 2 Police & Fire	2,455,864	2,352,585
▪ Tier 2 General Service	3,711,298	3,543,166
▪ **Total Active Members**	**$17,415,764**	**$17,190,823**
Dormant Members	4,461,804	4,132,576
Retired Members and Beneficiaries	16,868,177	16,286,823
Total Actuarial Accrued Liability	**$38,745,745**	**$37,610,222**

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	$38,745,745	$38,745,745	$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	$38,745,745	$37,610,222
2. Actuarial value of assets	40,424,622	36,288,108
3. Unfunded accrued liability *(1. – 2.)*	(1,678,877)	1,322,114
4. Funded percentage *(2. ÷ 1.)*	104%	96%
5. Combined valuation payroll	$7,615,815	$7,739,628
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(22%)	17%

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	($1,678,877)	($121,517)
Total				**($1,678,877)**	**($121,517)**

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	$37,610,222
b. Normal cost at December 31, 2012	703,885
c. Benefit payments during 2013	(1,607,078)
d. Interest at 7.75% to December 31, 2013	2,907,069
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	39,614,098
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.)*	39,614,098
2. Actuarial accrued liability at December 31, 2013	38,745,745
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	868,353
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	36,288,108
b. Contributions for 2013[1]	542,950
c. Benefit payments and expenses during 2013	(1,619,926)
d. Interest at 7.75% to December 31, 2013	2,770,596
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	37,981,727
5. Actuarial value of assets at December 31, 2013	40,424,622
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	2,442,895
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$3,311,248**

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	**$1,322,114**
2. Expected increase	310,257
3. Liability (gain)/loss	(868,353)
4. Asset (gain)/loss	(2,442,895)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($1,678,877)**

[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	$119,902	$696,289	17.22%	$126,110	$741,340	17.01%
Tier 1 General Service	225,071	1,222,662	18.41%	231,036	1,295,813	17.83%
Tier 2 Police & Fire	136,824	840,298	16.28%	151,672	938,088	16.17%
Tier 2 General Service	189,851	1,836,756	10.34%	195,067	1,916,721	10.18%
Total	**$671,648**	**$4,596,005**	**14.61%**	**$703,885**	**$4,891,962**	**14.39%**

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	($1,678,877)	$1,322,114
2. Next year's Tier 1/Tier 2 UAL payment	(121,517)	95,694
3. Combined valuation payroll	7,615,815	7,739,628
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(1.60%)	1.24%

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	14.61%	14.39%
b. Tier 1/Tier 2 UAL rate	(1.60%)	1.24%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.16%	15.76%

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	10.90%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.90%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.18%
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%)*	7.90%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.90%
7. July 1, 2015 total pension rate, before adjustment	13.16%
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	(1.60%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(1.60%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.16%
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	14.61%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.61%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.16%

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	14.61%	14.39%
b. Tier 1/Tier 2 UAL rate	(1.60%)	(0.62%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	13.16%	13.90%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$1,222,662	$696,289	$1,918,951
Tier 2	1,836,756	840,298	2,677,054
Tier 1/Tier 2 valuation payroll	3,059,418	1,536,587	4,596,005
OPSRP valuation payroll	2,070,287	949,523	3,019,810
Combined valuation payroll	**$5,129,705**	**$2,486,110**	**$7,615,815**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	25	42	52	119	27	47	49	123
Police & Fire	11	14	17	42	12	16	16	44
Total	36	56	69	161	39	63	65	167
Active Members with previous service segments with the employer								
General Service	21	14	N/A	35	13	7	N/A	20
Police & Fire	7	6	N/A	13	6	4	N/A	10
Total	28	20	N/A	48	19	11	N/A	30
Dormant Members								
General Service	32	16	8	56	39	16	5	60
Police & Fire	6	6	1	13	6	6	1	13
Total	38	22	9	69	45	22	6	73
Retired Members and Beneficiaries								
General Service	119	11	2	132	114	8	0	122
Police & Fire	34	2	0	36	31	3	0	34
Total	153	13	2	168	145	11	0	156
Grand Total Number of Members	**255**	**111**	**80**	**446**	**248**	**107**	**71**	**426**

[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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39			5	4						9
40-44		1	9	4	1					15
45-49			5	7	1	1				14
50-54			9	3	6					18
55-59		1	6	6	4		2	1		20
60-64			4	3		1			1	9
65-69			1	2	1	1			1	6
70-74			1							1
75+										
Total	**0**	**2**	**40**	**29**	**13**	**3**	**2**	**1**	**2**	**92**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39	7	607
40-44	6	622
45-49	5	1,369
50-54	12	626
55-59	10	335
60-64	12	1,220
65-69	5	847
70-74	3	348
75+		
Total	60	760

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	332
45-49		
50-54	4	1,329
55-59	10	422
60-64	31	589
65-69	39	970
70-74	25	1,059
75-79	27	1,054
80-84	11	622
85-89	12	386
90-94	5	516
95-99	1	602
100+		
Total	166	817

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Mapleton Water District/2597
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.

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.

Milliman

September 2014
Mapleton Water District/2597

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Mapleton Water District -- #2597

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Mapleton Water 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 Mapleton Water 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 Mapleton Water District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.41%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(1.39%)	(1.39%)	(1.39%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.63%**	**6.55%**	**10.66%**
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	**13.16%**	**7.00%**	**11.11%**

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 107%.

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	12.02%	12.02%
Minimum July 1, 2017 Rate	9.02%	6.02%
Maximum July 1, 2017 Rate	15.02%	18.02%

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	$118,733	$156,152	$37,419	76%	$59,350	63%
12/31/2009	138,450	170,867	32,417	81%	60,927	53%
12/31/2010	139,940	157,303	17,363	89%	69,364	25%
12/31/2011	147,113	169,350	22,237	87%	62,272	36%
12/31/2012	172,579	179,803	7,224	96%	63,361	11%
12/31/2013	200,313	187,040	(13,273)	107%	62,438	(21%)

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		
		OPSRP	
	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.

Mapleton Water District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($13,273)	$7,224
Allocated pooled OPSRP UAL	4,415	4,466
Side account	0	0
Net unfunded pension actuarial accrued liability	(8,858)	11,690
Combined valuation payroll	62,438	63,361
Net pension UAL as a percentage of payroll	(14%)	18%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$864	$1,329

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	$6,966	$6,830
Tier 1/Tier 2 valuation payroll	51,935	51,950
Tier 1/Tier 2 pension normal cost rate	13.41%	13.15%
Tier 1/ Tier 2 Actuarial accrued liability	$187,040	$179,803
Actuarial asset value	200,313	172,579
Tier 1/Tier 2 Unfunded actuarial accrued liability	(13,273)	7,224
Tier 1/ Tier 2 Funded status	107%	96%
Combined valuation payroll	$62,438	$63,361
Tier 1/Tier 2 UAL as a percentage of payroll	(21%)	11%
Tier 1/Tier 2 UAL rate	(1.39%)	0.96%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	62,438	63,361
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]	$50,272	$46,284
2. Employer reserves	124,627	101,399
3. Benefits in force reserve	25,414	24,895
4. Total market value of assets ***(1. + 2. + 3.)***	**$200,313**	**$172,579**

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	$172,579
2.	Regular employer contributions	6,465
3.	Benefit payments and expense	(3,934)
4.	Adjustments [2]	1,290
5.	Interest credited	23,913
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$200,313**

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	6,966	6,830
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$6,966**	**$6,830**

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	$6,966	$6,966	$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	146,073	137,850
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$146,073**	**$137,850**
Dormant Members	0	0
Retired Members and Beneficiaries	40,967	41,953
Total Actuarial Accrued Liability	**$187,040**	**$179,803**

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	$187,040	$187,040	$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	$187,040	$179,803
2. Actuarial value of assets	200,313	172,579
3. Unfunded accrued liability *(1. – 2.)*	(13,273)	7,224
4. Funded percentage *(2. ÷ 1.)*	107%	96%
5. Combined valuation payroll	$62,438	$63,361
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(21%)	11%

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	($13,273)	($961)
Total				**($13,273)**	**($961)**

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	$179,803
b. Normal cost at December 31, 2012	6,830
c. Benefit payments during 2013	(3,903)
d. Interest at 7.75% to December 31, 2013	14,313
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	197,043
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.)*	197,043
2. Actuarial accrued liability at December 31, 2013	187,040
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	10,003
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	172,579
b. Contributions for 2013[1]	6,465
c. Benefit payments and expenses during 2013	(3,934)
d. Interest at 7.75% to December 31, 2013	13,473
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	188,583
5. Actuarial value of assets at December 31, 2013	200,313
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	11,730
7. Total actuarial gain/(loss) *(3. + 6.)*	**$21,733**

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	**$7,224**
2. Expected increase	1,236
3. Liability (gain)/loss	(10,003)
4. Asset (gain)/loss	(11,730)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($13,273)**

[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	6,966	51,935	13.41%	6,830	51,950	13.15%
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	**$6,966**	**$51,935**	**13.41%**	**$6,830**	**$51,950**	**13.15%**

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	($13,273)	$7,224
2. Next year's Tier 1/Tier 2 UAL payment	(961)	523
3. Combined valuation payroll	62,438	63,361
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(1.54%)	0.83%

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	13.41%	13.15%
b. Tier 1/Tier 2 UAL rate	(1.54%)	0.83%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	12.02%	14.11%

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	12.48%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	12.48%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.50%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	107%
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%)*	9.48%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	15.48%
7. July 1, 2015 total pension rate, before adjustment	12.02%
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	(1.54%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(1.54%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.02%
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	13.41%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.41%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	12.02%

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	13.41%	13.15%
b. Tier 1/Tier 2 UAL rate	(1.54%)	0.83%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	12.02%	14.11%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$51,935	$0	$51,935
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	51,935	0	51,935
OPSRP valuation payroll	10,503	0	10,503
Combined valuation payroll	**$62,438**	**$0**	**$62,438**

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	1	2	1	0	1	2
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	1	2	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	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**	**1**	**3**	**2**	**0**	**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 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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**	**1**	**0**	**0**	**0**	**0**	**0**	**1**

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84	1	528
85-89		
90-94		
95-99		
100+		
Total	1	528

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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Mid-Columbia Fire And Rescue V1-801/2877
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.

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
Mid-Columbia Fire And Rescue V1-801/2877

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

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

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

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

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

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

Sincerely,

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

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Mid-Columbia Fire And Rescue V1-801 -- #2877

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Mid-Columbia Fire And Rescue V1-801 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 Mid-Columbia Fire And Rescue V1-801.

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 Mid-Columbia Fire And Rescue V1-801

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.80%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.18%	0.18%	0.18%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.59%**	**8.12%**	**12.23%**
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	**15.12%**	**8.57%**	**12.68%**

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 72%.

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	13.98%	13.98%
Minimum July 1, 2017 Rate	10.98%	7.98%
Maximum July 1, 2017 Rate	16.98%	19.98%

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	4,351	7,233	2,882	60%	107,251	3%
12/31/2013	19,554	27,204	7,650	72%	1,870,603	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		
		OPSRP	
	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.

Mid-Columbia Fire And Rescue V1-801

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$7,650	$2,882
Allocated pooled OPSRP UAL	132,263	7,559
Side account	0	0
Net unfunded pension actuarial accrued liability	139,913	10,441
Combined valuation payroll	1,870,603	107,251
Net pension UAL as a percentage of payroll	7%	10%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$25,891	$2,250

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	$11,816	$9,955
Tier 1/Tier 2 valuation payroll	85,608	41,034
Tier 1/Tier 2 pension normal cost rate	13.80%	24.26%
Tier 1/ Tier 2 Actuarial accrued liability	$27,204	$7,233
Actuarial asset value	19,554	4,351
Tier 1/Tier 2 Unfunded actuarial accrued liability	7,650	2,882
Tier 1/ Tier 2 Funded status	72%	60%
Combined valuation payroll	$1,870,603	$107,251
Tier 1/Tier 2 UAL as a percentage of payroll	0%	3%
Tier 1/Tier 2 UAL rate	0.18%	0.32%
(includes Multnomah Fire District #10)		
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	Actuarial Valuation as of 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) **RHIA**	Actuarial Valuation as of December 31, 2013	Actuarial Valuation as of December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

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

All information in this table has been provided by PERS.

	New	Continuing	Total
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	1,870,603	107,251
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	19,554	4,351
3. Benefits in force reserve	0	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$19,554**	**$4,351**

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	$4,351
2. Regular employer contributions	14,375
3. Benefit payments and expense	0
4. Adjustments[2]	(2,260)
5. Interest credited	3,089
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$19,554**

[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	$11,816	$9,955
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$11,816**	**$9,955**

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	$11,816	$11,816	$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	$27,204	$7,233
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$27,204**	**$7,233**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$27,204**	**$7,233**

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	$27,204	$27,204	$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	$27,204	$7,233
2. Actuarial value of assets	19,554	4,351
3. Unfunded accrued liability *(1. – 2.)*	7,650	2,882
4. Funded percentage *(2. ÷ 1.)*	72%	60%
5. Combined valuation payroll	$1,870,603	$107,251
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	0%	3%

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	$7,650	$554
Total				**$7,650**	**$554**

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	$7,233
b. Normal cost at December 31, 2012	9,955
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	1,332
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	18,520
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.)*	18,520
2. Actuarial accrued liability at December 31, 2013	27,204
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(8,684)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	4,351
b. Contributions for 2013[1]	14,375
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	894
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	19,620
5. Actuarial value of assets at December 31, 2013	19,554
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	(66)
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($8,750)**

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	**$2,882**
2. Expected increase	(3,982)
3. Liability (gain)/loss	8,684
4. Asset (gain)/loss	66
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$7,650**

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	$11,816	$85,608	13.80%	$9,955	$41,034	24.26%
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	**$11,816**	**$85,608**	**13.80%**	**$9,955**	**$41,034**	**24.26%**

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	$7,650	$2,882
2. Next year's Tier 1/Tier 2 UAL payment	554	209
3. Combined valuation payroll	1,870,603	107,251
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.03%	0.19%

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	13.80%	24.26%
b. Tier 1/Tier 2 UAL rate	0.03%	0.19%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.98%	24.58%

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	13.98%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.98%
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	13.80%	24.26%
b. Tier 1/Tier 2 UAL rate	0.03%	0.19%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	13.98%	24.58%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$85,608	$85,608
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	85,608	85,608
OPSRP valuation payroll	55,762	1,729,233	1,784,995
Combined valuation payroll	**$55,762**	**$1,814,841**	**$1,870,603**

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	19	20	1	0	1	2
Total	1	0	20	21	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	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**	**20**	**21**	**1**	**0**	**1**	**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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
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:

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

Economic Assumptions

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

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

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

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

Changes in Actuarial Methods and Allocation Procedures

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

Changes in Assumptions

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

Brief Summary of Changes in Plan Provisions

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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September 2014

Millington Rural Fire Protection District/2782
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.

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
Millington Rural Fire Protection District/2782

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

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA	Scott D. Preppernau, FSA, EA
Principal and Consulting Actuary	Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Millington Rural Fire Protection District -- #2782

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Millington 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 Millington 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 Millington Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	20.18%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(14.71%)	(14.71%)	(14.71%)
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 147%.

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	$186,290	$159,772	($26,518)	117%	$50,937	(52%)
12/31/2009	220,360	176,331	(44,029)	125%	51,690	(85%)
12/31/2010	246,303	186,201	(60,102)	132%	51,994	(116%)
12/31/2011	258,024	202,616	(55,408)	127%	51,989	(107%)
12/31/2012	298,900	214,629	(84,271)	139%	52,504	(161%)
12/31/2013	343,781	233,282	(110,499)	147%	53,819	(205%)

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		
		OPSRP	
	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.

Millington Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	($110,499)	($84,271)
Allocated pooled OPSRP UAL	3,805	3,701
Side account	0	0
Net unfunded pension actuarial accrued liability	(106,694)	(80,570)
Combined valuation payroll	53,819	52,504
Net pension UAL as a percentage of payroll	(198%)	(153%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$745	$1,102

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	$10,046	$9,718
Tier 1/Tier 2 valuation payroll	53,819	52,504
Tier 1/Tier 2 pension normal cost rate	20.18%	18.51%
Tier 1/ Tier 2 Actuarial accrued liability	$233,282	$214,629
Actuarial asset value	343,781	298,900
Tier 1/Tier 2 Unfunded actuarial accrued liability	(110,499)	(84,271)
Tier 1/ Tier 2 Funded status	147%	139%
Combined valuation payroll	$53,819	$52,504
Tier 1/Tier 2 UAL as a percentage of payroll	(205%)	(161%)
Tier 1/Tier 2 UAL rate	(14.71%)	(11.49%)
(includes Multnomah Fire District #10)		
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	53,819	52,504
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]	$85,653	$78,859
2. Employer reserves	258,128	220,041
3. Benefits in force reserve	0	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$343,781**	**$298,900**

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	$298,900
2.	Regular employer contributions	3,316
3.	Benefit payments and expense	0
4.	Adjustments[2]	488
5.	Interest credited	41,077
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$343,781**

[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	$10,046	$9,718
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$10,046**	**$9,718**

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	$10,046	$10,046	$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	$233,282	$214,629
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$233,282**	**$214,629**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$233,282**	**$214,629**

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	$233,282	$233,282	$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	$233,282	$214,629
2. Actuarial value of assets	343,781	298,900
3. Unfunded accrued liability *(1. – 2.)*	(110,499)	(84,271)
4. Funded percentage *(2. ÷ 1.)*	147%	139%
5. Combined valuation payroll	$53,819	$52,504
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(205%)	(161%)

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	($110,499)	($7,998)
Total				**($110,499)**	**($7,998)**

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	$214,629
b. Normal cost at December 31, 2012	9,718
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	17,387
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	241,734
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.)*	241,734
2. Actuarial accrued liability at December 31, 2013	233,282
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	8,452
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	298,900
b. Contributions for 2013[1]	3,316
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	23,293
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	325,510
5. Actuarial value of assets at December 31, 2013	343,781
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	18,272
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$26,724**

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	**($84,271)**
2. Expected increase	496
3. Liability (gain)/loss	(8,452)
4. Asset (gain)/loss	(18,272)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($110,499)**

[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	$10,046	$53,819	18.67%	$9,718	$52,504	18.51%
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	**$10,046**	**$53,819**	**18.67%**	**$9,718**	**$52,504**	**18.51%**

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	($110,499)	($84,271)
2. Next year's Tier 1/Tier 2 UAL payment	(7,998)	(6,100)
3. Combined valuation payroll	53,819	52,504
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(14.86%)	(11.62%)

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	18.67%	18.51%
b. Tier 1/Tier 2 UAL rate	(14.86%)	(11.62%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	3.96%	7.02%

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	147%
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	3.96%
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	(14.86%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(14.86%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	3.96%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	1.51%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	18.67%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	20.18%
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	20.18%	18.51%
b. Tier 1/Tier 2 UAL rate	(14.86%)	(11.62%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	5.47%	7.02%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$53,819	$53,819
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	53,819	53,819
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$0**	**$53,819**	**$53,819**

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	0	0	1	1	0	0	1
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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<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

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members’ regular account balances starting in 2014. 7.75% compounded annually on members’ variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Mosier Fire District/2873
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.

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.

Milliman

September 2014
Mosier Fire District/2873

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Mosier Fire District -- #2873

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Mosier 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 Mosier 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 Mosier Fire District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.24%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(2.79%)	(2.79%)	(2.79%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.06%**	**5.15%**	**9.26%**
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	**12.59%**	**5.60%**	**9.71%**

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	11.45%	11.45%
Minimum July 1, 2017 Rate	8.45%	5.45%
Maximum July 1, 2017 Rate	14.45%	17.45%

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%	36,000	0%
12/31/2012	(15)	0	15	0%	38,970	0%
12/31/2013	(517)	0	517	0%	38,765	1%

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		
		OPSRP	
	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.

Mosier Fire District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$517	$15
Allocated pooled OPSRP UAL	2,741	2,747
Side account	0	0
Net unfunded pension actuarial accrued liability	3,258	2,762
Combined valuation payroll	38,765	38,970
Net pension UAL as a percentage of payroll	8%	7%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$537	$818

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	(517)	(15)
Tier 1/Tier 2 Unfunded actuarial accrued liability	517	15
Tier 1/ Tier 2 Funded status	0%	0%
Combined valuation payroll	$38,765	$38,970
Tier 1/Tier 2 UAL as a percentage of payroll	1%	0%
Tier 1/Tier 2 UAL rate	(2.79%)	0.13%
(includes Multnomah Fire District #10)		
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	38,765	38,970
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	(517)	(15)
3. Benefits in force reserve	0	0
4. Total market value of assets ***(1. + 2. + 3.)***	**($517)**	**($15)**

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	($15)
2.	Regular employer contributions	(401)
3.	Benefit payments and expense	0
4.	Adjustments[2]	(45)
5.	Interest credited	(56)
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**($517)**

[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	(517)	(15)
3. Unfunded accrued liability *(1. – 2.)*	517	15
4. Funded percentage *(2. ÷ 1.)*	100%	100%
5. Combined valuation payroll	$38,765	$38,970
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	1%	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	$517	$37
Total				**$517**	**$37**

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	(15)
b. Contributions for 2013[1]	(401)
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	(17)
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	(433)
5. Actuarial value of assets at December 31, 2013	(517)
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	(84)
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($84)**

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	**$15**
2. Expected increase	418
3. Liability (gain)/loss	0
4. Asset (gain)/loss	84
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$517**

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	$517	$15
2. Next year's Tier 1/Tier 2 UAL payment	37	1
3. Combined valuation payroll	38,765	38,970
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.10%	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	0.10%	0.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	14.49%	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	8.45%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	8.45%
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%)*	5.45%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.45%
7. July 1, 2015 total pension rate, before adjustment	14.49%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(3.04%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.10%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(2.94%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.45%
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.)*	11.45%

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	(2.94%)	0.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	11.45%	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	38,765	38,765
Combined valuation payroll	**$0**	**$38,765**	**$38,765**

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	1	1	0	0	1	1
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	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**	**1**	**1**	**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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Mt Angel Fire District/2861
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
Mt Angel Fire District/2861

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.

Milliman

September 2014
Mt Angel Fire District/2861

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA	Scott D. Preppernau, FSA, EA
Principal and Consulting Actuary	Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Mt Angel Fire District -- #2861

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Mt Angel 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 Mt Angel 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 Mt Angel Fire District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.46%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(3.32%)	(3.32%)	(3.32%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.75%**	**4.62%**	**8.73%**
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	**13.28%**	**5.07%**	**9.18%**

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 454%.

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	12.14%	12.14%
Minimum July 1, 2017 Rate	9.14%	6.14%
Maximum July 1, 2017 Rate	15.14%	18.14%

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	$6,893	$0	($6,893)	0%	$20,344	(34%)
12/31/2009	7,169	0	(7,169)	0%	21,279	(34%)
12/31/2010	7,032	0	(7,032)	0%	24,423	(29%)
12/31/2011	6,360	0	(6,360)	100%	24,660	(26%)
12/31/2012	7,147	0	(7,147)	0%	15,167	(47%)
12/31/2013	7,909	1,744	(6,165)	453%	30,273	(20%)

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		
		OPSRP	
	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.

Mt Angel Fire District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($6,165)	($7,147)
Allocated pooled OPSRP UAL	2,140	1,069
Side account	0	0
Net unfunded pension actuarial accrued liability	(4,025)	(6,078)
Combined valuation payroll	30,273	15,167
Net pension UAL as a percentage of payroll	(13%)	(40%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$419	$318

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	$1,852	$0
Tier 1/Tier 2 valuation payroll	11,981	0
Tier 1/Tier 2 pension normal cost rate	15.46%	14.33%
Tier 1/ Tier 2 Actuarial accrued liability	$1,744	$0
Actuarial asset value	7,909	7,147
Tier 1/Tier 2 Unfunded actuarial accrued liability	(6,165)	(7,147)
Tier 1/ Tier 2 Funded status	453%	0%
Combined valuation payroll	$30,273	$15,167
Tier 1/Tier 2 UAL as a percentage of payroll	(20%)	(47%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(3.32%)	(3.28%)
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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	30,273	15,167
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	7,909	7,147
3. Benefits in force reserve	0	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$7,909**	**$7,147**

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	$7,147
2. Regular employer contributions	(268)
3. Benefit payments and expense	0
4. Adjustments[2]	(51)
5. Interest credited	1,080
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$7,909**

[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	1,852	0
Tier 2 General Service	0	0
Total	**$1,852**	**$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	$1,852	$1,852	$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	1,744	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$1,744**	**$0**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$1,744**	**$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	$1,744	$1,744	$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	$1,744	$0
2. Actuarial value of assets	7,909	7,147
3. Unfunded accrued liability *(1. – 2.)*	(6,165)	(7,147)
4. Funded percentage *(2. ÷ 1.)*	454%	100%
5. Combined valuation payroll	$30,273	$15,167
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(20%)	(47%)

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	($6,165)	($446)
Total				**($6,165)**	**($446)**

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	1,744
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(1,744)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	7,147
b. Contributions for 2013[1]	(268)
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	544
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	7,423
5. Actuarial value of assets at December 31, 2013	7,909
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	486
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($1,258)**

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	**($7,147)**
2. Expected increase	(276)
3. Liability (gain)/loss	1,744
4. Asset (gain)/loss	(486)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($6,165)**

[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	1,852	11,981	15.46%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$1,852**	**$11,981**	**15.46%**	**$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	($6,165)	($7,147)
2. Next year's Tier 1/Tier 2 UAL payment	(446)	(517)
3. Combined valuation payroll	30,273	15,167
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(1.47%)	(3.41%)

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	15.46%	14.33%
b. Tier 1/Tier 2 UAL rate	(1.47%)	(3.41%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	14.14%	11.05%

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	6.14%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	6.14%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.23%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	454%
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%)*	0.14%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	12.14%
7. July 1, 2015 total pension rate, before adjustment	14.14%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.00%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(1.47%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.47%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.14%
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	15.46%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.46%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	12.14%

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	15.46%	14.33%
b. Tier 1/Tier 2 UAL rate	(3.47%)	(3.41%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	12.14%	11.05%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	0	11,981	11,981
Tier 1/Tier 2 valuation payroll	0	11,981	11,981
OPSRP valuation payroll	18,292	0	18,292
Combined valuation payroll	**$18,292**	**$11,981**	**$30,273**

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	1	1
Total	0	0	1	1	0	0	2	2
Active Members with previous service segments with the employer								
General Service	0	1	N/A	1	0	0	N/A	0
Police & Fire	0	1	N/A	1	0	0	N/A	0
Total	0	2	N/A	2	0	0	N/A	0
Dormant Members								
General Service	0	0	1	1	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	1	1	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**	**2**	**4**	**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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Nehalem Bay Wastewater Agency/2724
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.

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
Nehalem Bay Wastewater Agency/2724

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Nehalem Bay Wastewater Agency -- #2724

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Nehalem Bay Wastewater Agency 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 Nehalem Bay Wastewater Agency.

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 Nehalem Bay Wastewater Agency

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.41%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(6.00%)	(6.00%)	(6.00%)
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%**	**1.94%**	**6.05%**
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%**	**2.39%**	**6.50%**

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	$1,255,664	$1,442,024	$186,360	87%	$164,832	113%
12/31/2009	1,330,230	1,423,510	93,280	93%	254,429	37%
12/31/2010	1,376,367	1,506,536	130,169	91%	243,310	54%
12/31/2011	1,373,769	1,556,184	182,415	88%	289,012	63%
12/31/2012	1,530,538	1,473,807	(56,731)	104%	328,849	(17%)
12/31/2013	1,718,009	1,554,879	(163,130)	110%	349,854	(47%)

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		
		OPSRP	
	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.

Nehalem Bay Wastewater Agency

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($163,130)	($56,731)
Allocated pooled OPSRP UAL	24,737	23,178
Side account	0	0
Net unfunded pension actuarial accrued liability	(138,393)	(33,553)
Combined valuation payroll	349,854	328,849
Net pension UAL as a percentage of payroll	(40%)	(10%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,842	$6,899

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	$20,567	$19,215
Tier 1/Tier 2 valuation payroll	142,718	133,232
Tier 1/Tier 2 pension normal cost rate	14.41%	14.42%
Tier 1/ Tier 2 Actuarial accrued liability	$1,554,879	$1,473,807
Actuarial asset value	1,718,009	1,530,538
Tier 1/Tier 2 Unfunded actuarial accrued liability	(163,130)	(56,731)
Tier 1/ Tier 2 Funded status	110%	104%
Combined valuation payroll	$349,854	$328,849
Tier 1/Tier 2 UAL as a percentage of payroll	(47%)	(17%)
Tier 1/Tier 2 UAL rate	(6.00%)	(6.01%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	2	2
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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	349,854	328,849
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]	$258,786	$230,783
2. Employer reserves	865,011	729,308
3. Benefits in force reserve	594,212	570,447
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,718,009**	**$1,530,538**

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	$1,530,538
2.	Regular employer contributions	19,323
3.	Benefit payments and expense	(91,987)
4.	Adjustments [2]	37,141
5.	Interest credited	222,994
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,718,009**

[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	20,567	19,215
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$20,567**	**$19,215**

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	$20,567	$20,567	$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	597,030	512,526
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$597,030**	**$512,526**
Dormant Members	0	0
Retired Members and Beneficiaries	957,849	961,281
Total Actuarial Accrued Liability	**$1,554,879**	**$1,473,807**

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	$1,554,879	$1,554,879	$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	$1,554,879	$1,473,807
2. Actuarial value of assets	1,718,009	1,530,538
3. Unfunded accrued liability *(1. – 2.)*	(163,130)	(56,731)
4. Funded percentage *(2. ÷ 1.)*	110%	104%
5. Combined valuation payroll	$349,854	$328,849
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(47%)	(17%)

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	($163,130)	($11,807)
Total				**($163,130)**	**($11,807)**

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	$1,473,807
b. Normal cost at December 31, 2012	19,215
c. Benefit payments during 2013	(91,257)
d. Interest at 7.75% to December 31, 2013	112,173
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,513,938
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.)*	1,513,938
2. Actuarial accrued liability at December 31, 2013	1,554,879
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(40,941)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,530,538
b. Contributions for 2013[1]	19,323
c. Benefit payments and expenses during 2013	(91,987)
d. Interest at 7.75% to December 31, 2013	115,801
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,573,675
5. Actuarial value of assets at December 31, 2013	1,718,009
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	144,334
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$103,393**

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	**($56,731)**
2. Expected increase	(3,006)
3. Liability (gain)/loss	40,941
4. Asset (gain)/loss	(144,334)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($163,130)**

[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	20,567	142,718	14.41%	19,215	133,232	14.42%
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	**$20,567**	**$142,718**	**14.41%**	**$19,215**	**$133,232**	**14.42%**

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	($163,130)	($56,731)
2. Next year's Tier 1/Tier 2 UAL payment	(11,807)	(4,106)
3. Combined valuation payroll	349,854	328,849
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(3.37%)	(1.25%)

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	14.41%	14.42%
b. Tier 1/Tier 2 UAL rate	(3.37%)	(1.25%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	11.19%	13.30%

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	11.19%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.78%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.37%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(6.15%)
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	14.41%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.41%
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	14.41%	14.42%
b. Tier 1/Tier 2 UAL rate	(6.15%)	(6.14%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	8.41%	8.41%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$142,718	$0	$142,718
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	142,718	0	142,718
OPSRP valuation payroll	207,136	0	207,136
Combined valuation payroll	**$349,854**	**$0**	**$349,854**

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	0	4	6	2	0	4	6
Police & Fire	0	0	0	0	0	0	0	0
Total	2	0	4	6	2	0	4	6
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	5	0	0	5	5	0	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	5	0	0	5	5	0	0	5
Grand Total Number of Members	**7**	**0**	**4**	**11**	**7**	**0**	**4**	**11**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49						1				**1**
50-54										
55-59					1					**1**
60-64										
65-69										
70-74										
75+										
Total	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	**Count**	**Average Deferred Monthly Benefit**
<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		

Retired Members and Beneficiaries

Age	**Count**	**Average Monthly Benefit**
<45		
45-49		
50-54		
55-59		
60-64	2	1,646
65-69	3	1,083
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	5	1,308

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members’ regular account balances starting in 2014. 7.75% compounded annually on members’ variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Neskowin Regional Sanitary Authority/2740
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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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
Neskowin Regional Sanitary Authority/2740

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Neskowin Regional Sanitary Authority -- #2740

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Neskowin Regional Sanitary 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 Neskowin Regional Sanitary 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 Neskowin Regional Sanitary Authority

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.27%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(2.61%)	(2.61%)	(2.61%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**9.27%**	**5.33%**	**9.44%**
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	**9.80%**	**5.78%**	**9.89%**

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 140%.

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	8.66%	8.66%
Minimum July 1, 2017 Rate	5.66%	2.66%
Maximum July 1, 2017 Rate	11.66%	14.66%

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	$164,759	$111,962	($52,797)	147%	$145,101	(36%)
12/31/2009	162,588	112,598	(49,990)	144%	164,413	(30%)
12/31/2010	183,374	129,211	(54,163)	142%	167,047	(32%)
12/31/2011	188,492	141,097	(47,395)	134%	171,129	(28%)
12/31/2012	215,562	162,032	(53,530)	133%	178,643	(30%)
12/31/2013	246,337	176,503	(69,834)	140%	183,027	(38%)

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		
		OPSRP	
	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.

Neskowin Regional Sanitary Authority

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($69,834)	($53,530)
Allocated pooled OPSRP UAL	12,941	12,591
Side account	0	0
Net unfunded pension actuarial accrued liability	(56,893)	(40,939)
Combined valuation payroll	183,027	178,643
Net pension UAL as a percentage of payroll	(31%)	(23%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,533	$3,748

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	$5,993	$5,834
Tier 1/Tier 2 valuation payroll	53,161	52,053
Tier 1/Tier 2 pension normal cost rate	11.27%	11.21%
Tier 1/ Tier 2 Actuarial accrued liability	$176,503	$162,032
Actuarial asset value	246,337	215,562
Tier 1/Tier 2 Unfunded actuarial accrued liability	(69,834)	(53,530)
Tier 1/ Tier 2 Funded status	140%	133%
Combined valuation payroll	$183,027	$178,643
Tier 1/Tier 2 UAL as a percentage of payroll	(38%)	(30%)
Tier 1/Tier 2 UAL rate	(2.61%)	(2.04%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	2	2
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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	183,027	178,643
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	0.00%	0.00%

[1] *For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.*

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]	$20,923	$18,732
2. Employer reserves	209,629	181,716
3. Benefits in force reserve	15,785	15,114
4. Total market value of assets ***(1. + 2. + 3.)***	**$246,337**	**$215,562**

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	$215,562
2.	Regular employer contributions	(199)
3.	Benefit payments and expense	(2,444)
4.	Adjustments [2]	901
5.	Interest credited	32,517
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$246,337**

[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	5,993	5,834
Total	**$5,993**	**$5,834**

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	$5,993	$5,993	$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	93,653	83,229
▪ **Total Active Members**	**$93,653**	**$83,229**
Dormant Members	57,405	53,333
Retired Members and Beneficiaries	25,445	25,470
Total Actuarial Accrued Liability	**$176,503**	**$162,032**

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	$176,503	$176,503	$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	$176,503	$162,032
2. Actuarial value of assets	246,337	215,562
3. Unfunded accrued liability *(1. – 2.)*	(69,834)	(53,530)
4. Funded percentage *(2. ÷ 1.)*	140%	133%
5. Combined valuation payroll	$183,027	$178,643
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(38%)	(30%)

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	($69,834)	($5,055)
Total				**($69,834)**	**($5,055)**

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	$162,032
b. Normal cost at December 31, 2012	5,834
c. Benefit payments during 2013	(2,424)
d. Interest at 7.75% to December 31, 2013	12,916
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	178,358
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.)*	178,358
2. Actuarial accrued liability at December 31, 2013	176,503
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	1,855
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	215,562
b. Contributions for 2013[1]	(199)
c. Benefit payments and expenses during 2013	(2,444)
d. Interest at 7.75% to December 31, 2013	16,604
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	229,523
5. Actuarial value of assets at December 31, 2013	246,337
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	16,814
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$18,669**

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	**($53,530)**
2. Expected increase	2,365
3. Liability (gain)/loss	(1,855)
4. Asset (gain)/loss	(16,814)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($69,834)**

[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	5,993	53,161	11.27%	5,834	52,053	11.21%
Total	**$5,993**	**$53,161**	**11.27%**	**$5,834**	**$52,053**	**11.21%**

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	($69,834)	($53,530)
2. Next year's Tier 1/Tier 2 UAL payment	(5,055)	(3,874)
3. Combined valuation payroll	183,027	178,643
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(2.76%)	(2.17%)

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	11.27%	11.21%
b. Tier 1/Tier 2 UAL rate	(2.76%)	(2.17%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	8.66%	9.17%

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	7.40%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	7.40%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.48%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	140%
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%)*	1.40%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.40%
7. July 1, 2015 total pension rate, before adjustment	8.66%
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	(2.76%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(2.76%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.66%
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	11.27%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.27%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	8.66%

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	11.27%	11.21%
b. Tier 1/Tier 2 UAL rate	(2.76%)	(2.17%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	8.66%	9.17%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	53,161	0	53,161
Tier 1/Tier 2 valuation payroll	53,161	0	53,161
OPSRP valuation payroll	129,866	0	129,866
Combined valuation payroll	**$183,027**	**$0**	**$183,027**

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	3	4	0	1	3	4
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	3	4	0	1	3	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	1	1	0	2	1	1	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	0	2	1	1	0	2
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**	**2**	**3**	**8**	**3**	**2**	**3**	**8**

[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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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	1	0	0	0	0	0	0	1

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54		
55-59	1	192
60-64		
65-69	1	250
70-74		
75+		
Total	2	221

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	1	140
65-69		
70-74		
75-79	1	43
80-84		
85-89		
90-94		
95-99		
100+		
Total	2	92

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

North Clackamas County Water Commission/2835
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.

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.

Milliman

September 2014
North Clackamas County Water Commission/2835

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

North Clackamas County Water Commission -- #2835

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for North Clackamas County Water Commission 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 North Clackamas County Water Commission.

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 North Clackamas County Water Commission

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	16.09%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(6.16%)	(6.16%)	(6.16%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.54%**	**1.78%**	**5.89%**
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	**11.07%**	**2.23%**	**6.34%**

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 81%.

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	9.93%	9.93%
Minimum July 1, 2017 Rate	6.93%	3.93%
Maximum July 1, 2017 Rate	12.93%	15.93%

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	$160,095	$192,244	$32,149	83%	$288,572	11%
12/31/2009	207,219	235,186	27,967	88%	347,628	8%
12/31/2010	246,229	297,902	51,673	83%	277,048	19%
12/31/2011	267,657	344,501	76,844	78%	232,626	33%
12/31/2012	324,353	435,475	111,122	74%	245,417	45%
12/31/2013	390,977	483,852	92,875	81%	242,904	38%

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		
		OPSRP	
	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.

North Clackamas County Water Commission

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$92,875	$111,122
Allocated pooled OPSRP UAL	17,175	17,298
Side account	0	0
Net unfunded pension actuarial accrued liability	110,050	128,420
Combined valuation payroll	242,904	245,417
Net pension UAL as a percentage of payroll	45%	52%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,362	$5,149

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	$39,077	$38,050
Tier 1/Tier 2 valuation payroll	242,904	245,417
Tier 1/Tier 2 pension normal cost rate	16.09%	15.50%
Tier 1/ Tier 2 Actuarial accrued liability	$483,852	$435,475
Actuarial asset value	390,977	324,353
Tier 1/Tier 2 Unfunded actuarial accrued liability	92,875	111,122
Tier 1/ Tier 2 Funded status	81%	74%
Combined valuation payroll	$242,904	$245,417
Tier 1/Tier 2 UAL as a percentage of payroll	38%	45%
Tier 1/Tier 2 UAL rate	(6.16%)	(5.57%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	3	3
Tier 1/Tier 2 dormant members	1	1
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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	242,904	245,417
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]	$80,107	$71,602
2. Employer reserves	310,870	252,751
3. Benefits in force reserve	0	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$390,977**	**$324,353**

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	$324,353
2.	Regular employer contributions	16,385
3.	Benefit payments and expense	0
4.	Adjustments[2]	263
5.	Interest credited	49,976
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$390,977**

[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	28,601	27,784
Tier 2 Police & Fire	0	0
Tier 2 General Service	10,476	10,266
Total	**$39,077**	**$38,050**

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	$39,077	$39,077	$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	260,631	228,539
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	199,650	184,802
▪ **Total Active Members**	**$460,281**	**$413,341**
Dormant Members	23,571	22,134
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$483,852**	**$435,475**

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	$483,852	$483,852	$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	$483,852	$435,475
2. Actuarial value of assets	390,977	324,353
3. Unfunded accrued liability *(1. – 2.)*	92,875	111,122
4. Funded percentage *(2. ÷ 1.)*	81%	74%
5. Combined valuation payroll	$242,904	$245,417
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	38%	45%

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	$92,875	$6,722
Total				**$92,875**	**$6,722**

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	$435,475
b. Normal cost at December 31, 2012	38,050
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	36,698
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	510,223
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.)*	510,223
2. Actuarial accrued liability at December 31, 2013	483,852
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	26,371
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	324,353
b. Contributions for 2013[1]	16,385
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	25,772
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	366,511
5. Actuarial value of assets at December 31, 2013	390,977
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	24,466
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$50,837**

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	**$111,122**
2. Expected increase	32,590
3. Liability (gain)/loss	(26,371)
4. Asset (gain)/loss	(24,466)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$92,875**

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	28,601	152,790	18.72%	27,784	154,744	17.95%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	10,476	90,114	11.63%	10,266	90,673	11.32%
Total	**$39,077**	**$242,904**	**16.09%**	**$38,050**	**$245,417**	**15.50%**

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	$92,875	$111,122
2. Next year's Tier 1/Tier 2 UAL payment	6,722	8,043
3. Combined valuation payroll	242,904	245,417
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.77%	3.28%

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	16.09%	15.50%
b. Tier 1/Tier 2 UAL rate	2.77%	3.28%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	19.01%	18.91%

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	6.93%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	6.93%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.39%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	81%
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%)*	3.93%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	9.93%
7. July 1, 2015 total pension rate, before adjustment	19.01%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(9.08%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	2.77%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(6.31%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.93%
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	16.09%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	16.09%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.93%

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	16.09%	15.50%
b. Tier 1/Tier 2 UAL rate	(6.31%)	(5.70%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	9.93%	9.93%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$152,790	$0	$152,790
Tier 2	90,114	0	90,114
Tier 1/Tier 2 valuation payroll	242,904	0	242,904
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$242,904**	**$0**	**$242,904**

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	1	0	3	2	1	0	3
Police & Fire	0	0	0	0	0	0	0	0
Total	2	1	0	3	2	1	0	3
Active Members with previous service segments with the employer								
General Service	0	1	N/A	1	0	1	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	1	N/A	1	0	1	N/A	1
Dormant Members								
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
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	**3**	**2**	**0**	**5**	**3**	**2**	**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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34										
35-39										
40-44					1					**1**
45-49										
50-54										
55-59				1			1			**2**
60-64										
65-69										
70-74										
75+										
Total	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**3**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54	1	263
55-59		
60-64		
65-69		
70-74		
75+		
Total	1	263

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Northeast Oregon Housing Authority/2637
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.

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
Northeast Oregon Housing Authority/2637

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA	Scott D. Preppernau, FSA, EA
Principal and Consulting Actuary	Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Northeast Oregon Housing Authority -- #2637

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Northeast Oregon 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 Northeast Oregon 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 Northeast Oregon Housing Authority

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.21%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(5.64%)	(5.64%)	(5.64%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.18%**	**2.30%**	**6.41%**
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	**10.71%**	**2.75%**	**6.86%**

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 92%.

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	9.57%	9.57%
Minimum July 1, 2017 Rate	6.57%	3.57%
Maximum July 1, 2017 Rate	12.57%	15.57%

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	$2,378,561	$2,656,235	$277,674	90%	$672,380	41%
12/31/2009	2,762,649	2,872,484	109,835	96%	784,113	14%
12/31/2010	3,078,550	3,121,528	42,978	99%	816,864	5%
12/31/2011	2,794,568	3,360,981	566,413	83%	683,194	83%
12/31/2012	3,107,972	3,364,806	256,834	92%	703,856	36%
12/31/2013	3,340,344	3,620,147	279,803	92%	727,538	38%

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		
		OPSRP	
	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.

Northeast Oregon Housing Authority

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$279,803	$256,834
Allocated pooled OPSRP UAL	51,441	49,610
Side account	0	0
Net unfunded pension actuarial accrued liability	331,244	306,444
Combined valuation payroll	727,538	703,856
Net pension UAL as a percentage of payroll	46%	44%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,070	$14,767

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	$60,696	$72,699
Tier 1/Tier 2 valuation payroll	399,009	454,448
Tier 1/Tier 2 pension normal cost rate	15.21%	16.00%
Tier 1/ Tier 2 Actuarial accrued liability	$3,620,147	$3,364,806
Actuarial asset value	3,340,344	3,107,972
Tier 1/Tier 2 Unfunded actuarial accrued liability	279,803	256,834
Tier 1/ Tier 2 Funded status	92%	92%
Combined valuation payroll	$727,538	$703,856
Tier 1/Tier 2 UAL as a percentage of payroll	38%	36%
Tier 1/Tier 2 UAL rate	(5.64%)	(6.43%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	7	9
Tier 1/Tier 2 dormant members	7	5
Tier 1/Tier 2 retirees and beneficiaries	6	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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	727,538	703,856
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	0.00%	0.00%

[1] *For employers with more than one side account, the Total Side Account Rate is determined by calculating the rate on each side account separately and adding the rates together.*

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]	$711,137	$824,638
2. Employer reserves	1,833,425	1,675,543
3. Benefits in force reserve	795,781	607,791
4. Total market value of assets ***(1. + 2. + 3.)***	**$3,340,344**	**$3,107,972**

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	$3,107,972
2. Regular employer contributions	29,403
3. Benefit payments and expense	(123,190)
4. Adjustments[2]	(86,628)
5. Interest credited	412,787
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$3,340,344**

[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	41,464	55,200
Tier 2 Police & Fire	0	0
Tier 2 General Service	19,232	17,499
Total	**$60,696**	**$72,699**

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	$60,696	$60,696	$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	1,159,478	1,517,973
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	344,540	291,463
▪ **Total Active Members**	**$1,504,018**	**$1,809,436**
Dormant Members	833,358	531,158
Retired Members and Beneficiaries	1,282,771	1,024,212
Total Actuarial Accrued Liability	**$3,620,147**	**$3,364,806**

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	$3,620,147	$3,620,147	$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	$3,620,147	$3,364,806
2. Actuarial value of assets	3,340,344	3,107,972
3. Unfunded accrued liability *(1. – 2.)*	279,803	256,834
4. Funded percentage *(2. ÷ 1.)*	92%	92%
5. Combined valuation payroll	$727,538	$703,856
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	38%	36%

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	$279,803	$20,252
Total				**$279,803**	**$20,252**

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	$3,364,806
b. Normal cost at December 31, 2012	72,699
c. Benefit payments during 2013	(122,213)
d. Interest at 7.75% to December 31, 2013	261,671
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	3,576,963
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.)*	3,576,963
2. Actuarial accrued liability at December 31, 2013	3,620,147
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(43,184)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	3,107,972
b. Contributions for 2013[1]	29,403
c. Benefit payments and expenses during 2013	(123,190)
d. Interest at 7.75% to December 31, 2013	237,234
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	3,251,418
5. Actuarial value of assets at December 31, 2013	3,340,344
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	88,925
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$45,741**

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	**$256,834**
2. Expected increase	68,710
3. Liability (gain)/loss	43,184
4. Asset (gain)/loss	(88,925)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$279,803**

[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	41,464	230,133	18.02%	55,200	299,715	18.42%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	19,232	168,876	11.39%	17,499	154,733	11.31%
Total	**$60,696**	**$399,009**	**15.21%**	**$72,699**	**$454,448**	**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	$279,803	$256,834
2. Next year's Tier 1/Tier 2 UAL payment	20,252	18,590
3. Combined valuation payroll	727,538	703,856
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.78%	2.64%

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	15.21%	16.00%
b. Tier 1/Tier 2 UAL rate	2.78%	2.64%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	18.14%	18.77%

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	6.57%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	6.57%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.31%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	92%
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%)*	3.57%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	9.57%
7. July 1, 2015 total pension rate, before adjustment	18.14%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(8.57%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	2.78%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(5.79%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.57%
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	15.21%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.21%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.57%

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	15.21%	16.00%
b. Tier 1/Tier 2 UAL rate	(5.79%)	(6.56%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	9.57%	9.57%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$230,133	$0	$230,133
Tier 2	168,876	0	168,876
Tier 1/Tier 2 valuation payroll	399,009	0	399,009
OPSRP valuation payroll	328,529	0	328,529
Combined valuation payroll	**$727,538**	**$0**	**$727,538**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	4	3	7	14	6	3	7	16
Police & Fire	0	0	0	0	0	0	0	0
Total	4	3	7	14	6	3	7	16
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	7	0	1	8	5	0	1	6
Police & Fire	0	0	0	0	0	0	0	0
Total	7	0	1	8	5	0	1	6
Retired Members and Beneficiaries								
General Service	5	1	0	6	4	1	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	5	1	0	6	4	1	0	5
Grand Total Number of Members	**17**	**4**	**8**	**29**	**15**	**4**	**8**	**27**

[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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54			1							1
55-59			1	1	1					3
60-64				1		2				3
65-69										
70-74										
75+										
Total	0	0	2	2	1	2	0	0	0	7

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44	1	1,962
45-49		
50-54	2	62
55-59	2	1,172
60-64	2	1,625
65-69		
70-74		
75+		
Total	7	1,097

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	2	1,338
65-69	3	1,821
70-74		
75-79		
80-84	1	1,307
85-89		
90-94		
95-99		
100+		
Total	6	1,574

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members’ regular account balances starting in 2014. 7.75% compounded annually on members’ variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Nyssa Road Assessment District #2/2550
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.

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
Nyssa Road Assessment District #2/2550

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Nyssa Road Assessment District #2 -- #2550

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Nyssa Road Assessment District #2 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 Nyssa Road Assessment District #2.

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 Nyssa Road Assessment District #2

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.19%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	18.13%	18.13%	18.13%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**33.93%**	**26.07%**	**30.18%**
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	**34.46%**	**26.52%**	**30.63%**

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 76%.

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	33.32%	33.32%
Minimum July 1, 2017 Rate	26.66%	20.00%
Maximum July 1, 2017 Rate	39.98%	46.64%

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	$835,920	$1,683,852	$847,932	50%	$144,035	589%
12/31/2009	933,276	1,702,643	769,367	55%	154,312	499%
12/31/2010	1,006,310	1,752,967	746,657	57%	158,434	471%
12/31/2011	1,003,416	1,782,911	779,495	56%	162,497	480%
12/31/2012	1,092,540	1,592,557	500,017	69%	171,200	292%
12/31/2013	1,250,536	1,638,254	387,718	76%	175,770	221%

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		
		OPSRP	
	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.

Nyssa Road Assessment District #2

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$387,718	$500,017
Allocated pooled OPSRP UAL	12,428	12,067
Side account	0	0
Net unfunded pension actuarial accrued liability	400,146	512,084
Combined valuation payroll	175,770	171,200
Net pension UAL as a percentage of payroll	228%	299%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,433	$3,592

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	$20,485	$19,602
Tier 1/Tier 2 valuation payroll	134,823	131,574
Tier 1/Tier 2 pension normal cost rate	15.19%	14.90%
Tier 1/ Tier 2 Actuarial accrued liability	$1,638,254	$1,592,557
Actuarial asset value	1,250,536	1,092,540
Tier 1/Tier 2 Unfunded actuarial accrued liability	387,718	500,017
Tier 1/ Tier 2 Funded status	76%	69%
Combined valuation payroll	$175,770	$171,200
Tier 1/Tier 2 UAL as a percentage of payroll	221%	292%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	18.13%	21.27%
Tier 1/Tier 2 active members [1]	3	3
Tier 1/Tier 2 dormant members	1	1
Tier 1/Tier 2 retirees and beneficiaries	7	7

[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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	175,770	171,200
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]	$259,959	$235,353
2. Employer reserves	337,732	223,147
3. Benefits in force reserve	652,846	634,040
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,250,536**	**$1,092,540**

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	$1,092,540
2.	Regular employer contributions	70,063
3.	Benefit payments and expense	(101,063)
4.	Adjustments [2]	32,603
5.	Interest credited	156,393
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,250,536**

[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	14,857	14,179
Tier 2 Police & Fire	0	0
Tier 2 General Service	5,628	5,423
Total	**$20,485**	**$19,602**

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	$20,485	$20,485	$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	454,946	406,439
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	26,419	20,640
▪ **Total Active Members**	**$481,365**	**$427,079**
Dormant Members	104,525	97,033
Retired Members and Beneficiaries	1,052,364	1,068,445
Total Actuarial Accrued Liability	**$1,638,254**	**$1,592,557**

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	$1,638,254	$1,638,254	$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	$1,638,254	$1,592,557
2. Actuarial value of assets	1,250,536	1,092,540
3. Unfunded accrued liability *(1. – 2.)*	387,718	500,017
4. Funded percentage *(2. ÷ 1.)*	76%	69%
5. Combined valuation payroll	$175,770	$171,200
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	221%	292%

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	$387,718	$28,063
Total				**$387,718**	**$28,063**

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	$1,592,557
b. Normal cost at December 31, 2012	19,602
c. Benefit payments during 2013	(100,262)
d. Interest at 7.75% to December 31, 2013	121,057
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,632,954
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.)*	1,632,954
2. Actuarial accrued liability at December 31, 2013	1,638,254
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(5,300)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,092,540
b. Contributions for 2013[1]	70,063
c. Benefit payments and expenses during 2013	(101,063)
d. Interest at 7.75% to December 31, 2013	83,471
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,145,010
5. Actuarial value of assets at December 31, 2013	1,250,536
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	105,526
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$100,226**

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	**$500,017**
2. Expected increase	(12,073)
3. Liability (gain)/loss	5,300
4. Asset (gain)/loss	(105,526)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$387,718**

[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	14,857	79,909	18.59%	14,179	77,956	18.19%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	5,628	54,914	10.25%	5,423	53,618	10.11%
Total	**$20,485**	**$134,823**	**15.19%**	**$19,602**	**$131,574**	**14.90%**

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	$387,718	$500,017
2. Next year's Tier 1/Tier 2 UAL payment	28,063	36,191
3. Combined valuation payroll	175,770	171,200
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	15.97%	21.14%

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	15.19%	14.90%
b. Tier 1/Tier 2 UAL rate	15.97%	21.14%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	31.31%	36.17%

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	41.65%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	41.65%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	8.33%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	8.33%
c. Funded percentage	76%
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.)*	8.33%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	33.32%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	49.98%
7. July 1, 2015 total pension rate, before adjustment	31.31%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	2.01%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	15.97%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	17.98%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	33.32%
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	15.19%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.19%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	33.32%

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	15.19%	14.90%
b. Tier 1/Tier 2 UAL rate	17.98%	21.14%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	33.32%	36.17%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$79,909	$0	$79,909
Tier 2	54,914	0	54,914
Tier 1/Tier 2 valuation payroll	134,823	0	134,823
OPSRP valuation payroll	40,947	0	40,947
Combined valuation payroll	**$175,770**	**$0**	**$175,770**

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	1	1	4	2	1	1	4
Police & Fire	0	0	0	0	0	0	0	0
Total	2	1	1	4	2	1	1	4
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	1	0	1	2	1	0	1	2
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	1	2	1	0	1	2
Retired Members and Beneficiaries								
General Service	7	0	0	7	7	0	0	7
Police & Fire	0	0	0	0	0	0	0	0
Total	7	0	0	7	7	0	0	7
Grand Total Number of Members	**11**	**1**	**2**	**14**	**10**	**1**	**2**	**13**

[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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54			1							1
55-59										
60-64					1	1				2
65-69										
70-74										
75+										
Total	0	0	1	0	1	1	0	0	0	3

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54		
55-59	1	697
60-64		
65-69		
70-74		
75+		
Total	1	697

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	1,280
60-64	1	46
65-69		
70-74	1	185
75-79	1	2,379
80-84	1	6,256
85-89	1	164
90-94	1	322
95-99		
100+		
Total	7	1,519

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Oak Lodge Sanitary District/2524
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.

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
Oak Lodge Sanitary District/2524

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Oak Lodge Sanitary District -- #2524

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Oak Lodge 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 Oak Lodge 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 Oak Lodge Sanitary District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.07%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	1.21%	1.21%	1.21%
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%**	**9.15%**	**13.26%**
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%**	**9.60%**	**13.71%**

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	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	$6,153,179	$7,531,284	$1,378,105	82%	$1,220,058	113%
12/31/2009	7,325,766	8,320,974	995,208	88%	1,586,102	63%
12/31/2010	7,332,942	8,828,349	1,495,407	83%	1,520,200	98%
12/31/2011	7,106,323	9,259,870	2,153,547	77%	1,814,102	119%
12/31/2012	7,723,464	9,061,693	1,338,229	85%	1,870,816	72%
12/31/2013	8,219,096	9,066,220	847,124	91%	1,921,520	44%

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		
		OPSRP	
	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.

Oak Lodge Sanitary District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$847,124	$1,338,229
Allocated pooled OPSRP UAL	135,863	131,860
Side account	0	0
Net unfunded pension actuarial accrued liability	982,987	1,470,089
Combined valuation payroll	1,921,520	1,870,816
Net pension UAL as a percentage of payroll	51%	79%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$26,596	$39,251

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	$117,175	$121,078
Tier 1/Tier 2 valuation payroll	1,058,466	1,035,336
Tier 1/Tier 2 pension normal cost rate	11.07%	11.69%
Tier 1/ Tier 2 Actuarial accrued liability	$9,066,220	$9,061,693
Actuarial asset value	8,219,096	7,723,464
Tier 1/Tier 2 Unfunded actuarial accrued liability	847,124	1,338,229
Tier 1/ Tier 2 Funded status	91%	85%
Combined valuation payroll	$1,921,520	$1,870,816
Tier 1/Tier 2 UAL as a percentage of payroll	44%	72%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	1.21%	0.59%
Tier 1/Tier 2 active members [1]	12	12
Tier 1/Tier 2 dormant members	4	6
Tier 1/Tier 2 retirees and beneficiaries	19	17

[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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	1,921,520	1,870,816
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]	$916,101	$990,354
2. Employer reserves	3,575,593	3,258,825
3. Benefits in force reserve	3,727,402	3,474,285
4. Total market value of assets ***(1. + 2. + 3.)***	**$8,219,096**	**$7,723,464**

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	$7,723,464
2.	Regular employer contributions	124,489
3.	Benefit payments and expense	(577,017)
4.	Adjustments [2]	(124,897)
5.	Interest credited	1,073,057
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$8,219,096**

[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	50,903	58,755
Tier 2 Police & Fire	0	0
Tier 2 General Service	66,272	62,323
Total	**$117,175**	**$121,078**

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	$117,175	$117,175	$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	1,009,683	1,361,391
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	1,107,206	970,050
▪ **Total Active Members**	**$2,116,889**	**$2,331,441**
Dormant Members	940,890	875,602
Retired Members and Beneficiaries	6,008,441	5,854,650
Total Actuarial Accrued Liability	**$9,066,220**	**$9,061,693**

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	$9,066,220	$9,066,220	$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	$9,066,220	$9,061,693
2. Actuarial value of assets	8,219,096	7,723,464
3. Unfunded accrued liability *(1. – 2.)*	847,124	1,338,229
4. Funded percentage *(2. ÷ 1.)*	91%	85%
5. Combined valuation payroll	$1,921,520	$1,870,816
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	44%	72%

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	$847,124	$61,315
Total				**$847,124**	**$61,315**

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	$9,061,693
b. Normal cost at December 31, 2012	121,078
c. Benefit payments during 2013	(572,441)
d. Interest at 7.75% to December 31, 2013	689,483
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	9,299,813
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.)*	9,299,813
2. Actuarial accrued liability at December 31, 2013	9,066,220
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	233,593
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	7,723,464
b. Contributions for 2013[1]	124,489
c. Benefit payments and expenses during 2013	(577,017)
d. Interest at 7.75% to December 31, 2013	581,033
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	7,851,968
5. Actuarial value of assets at December 31, 2013	8,219,096
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	367,127
7. Total actuarial gain/(loss) *(3. + 6.)*	**$600,720**

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	**$1,338,229**
2. Expected increase	109,615
3. Liability (gain)/loss	(233,593)
4. Asset (gain)/loss	(367,127)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$847,124**

[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	50,903	375,155	13.57%	58,755	404,841	14.51%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	66,272	683,311	9.70%	62,323	630,495	9.88%
Total	**$117,175**	**$1,058,466**	**11.07%**	**$121,078**	**$1,035,336**	**11.69%**

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	$847,124	$1,338,229
2. Next year's Tier 1/Tier 2 UAL payment	61,315	96,861
3. Combined valuation payroll	1,921,520	1,870,816
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.19%	5.18%

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	11.07%	11.69%
b. Tier 1/Tier 2 UAL rate	3.19%	5.18%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	14.41%	17.00%

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	9.28%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	9.28%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.86%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
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.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	6.28%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	12.28%
7. July 1, 2015 total pension rate, before adjustment	14.41%
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	3.19%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	1.06%
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	11.07%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.07%
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	11.07%	11.69%
b. Tier 1/Tier 2 UAL rate	1.06%	0.46%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	12.28%	12.28%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$375,155	$0	$375,155
Tier 2	683,311	0	683,311
Tier 1/Tier 2 valuation payroll	1,058,466	0	1,058,466
OPSRP valuation payroll	863,054	0	863,054
Combined valuation payroll	**$1,921,520**	**$0**	**$1,921,520**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	4	8	12	24	4	8	12	24
Police & Fire	0	0	0	0	0	0	0	0
Total	4	8	12	24	4	8	12	24
Active Members with previous service segments with the employer								
General Service	7	3	N/A	10	2	1	N/A	3
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	7	3	N/A	10	2	1	N/A	3
Dormant Members								
General Service	4	0	0	4	5	1	1	7
Police & Fire	0	0	0	0	0	0	0	0
Total	4	0	0	4	5	1	1	7
Retired Members and Beneficiaries								
General Service	18	1	0	19	15	2	0	17
Police & Fire	0	0	0	0	0	0	0	0
Total	18	1	0	19	15	2	0	17
Grand Total Number of Members	**33**	**12**	**12**	**57**	**26**	**12**	**13**	**51**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34										
35-39			1	1						**2**
40-44		1								**1**
45-49			2							**2**
50-54			2	1		1				**4**
55-59			1	1						**2**
60-64						1				**1**
65-69										
70-74										
75+										
Total	**0**	**1**	**6**	**3**	**0**	**2**	**0**	**0**	**0**	**12**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49	1	1,081
50-54	1	5,052
55-59	1	621
60-64		
65-69	1	1,957
70-74		
75+		
Total	4	2,178

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	158
60-64	10	3,111
65-69	3	1,180
70-74	3	1,824
75-79		
80-84	1	3,217
85-89	1	2,622
90-94		
95-99		
100+		
Total	19	2,428

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Oregon Coastal Zone Management Association/2723
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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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
Oregon Coastal Zone Management Association/2723

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Oregon Coastal Zone Management Association -- #2723

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Oregon Coastal Zone Management Association 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 Oregon Coastal Zone Management Association.

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 Oregon Coastal Zone Management Association

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	27.38%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(21.91%)	(21.91%)	(21.91%)
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 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	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	$547,195	$539,460	($7,735)	101%	$106,454	(7%)
12/31/2009	638,934	540,211	(98,723)	118%	111,777	(88%)
12/31/2010	646,619	605,147	(41,472)	107%	119,668	(35%)
12/31/2011	660,842	645,831	(15,011)	102%	124,205	(12%)
12/31/2012	748,625	636,567	(112,058)	118%	53,574	(209%)
12/31/2013	846,834	679,493	(167,341)	125%	54,908	(305%)

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		
		OPSRP	
	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.

Oregon Coastal Zone Management Association

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($167,341)	($112,058)
Allocated pooled OPSRP UAL	3,882	3,776
Side account	0	0
Net unfunded pension actuarial accrued liability	(163,459)	(108,282)
Combined valuation payroll	54,908	53,574
Net pension UAL as a percentage of payroll	(298%)	(202%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$760	$1,124

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	$14,104	$13,542
Tier 1/Tier 2 valuation payroll	54,908	53,574
Tier 1/Tier 2 pension normal cost rate	27.38%	25.28%
Tier 1/ Tier 2 Actuarial accrued liability	$679,493	$636,567
Actuarial asset value	846,834	748,625
Tier 1/Tier 2 Unfunded actuarial accrued liability	(167,341)	(112,058)
Tier 1/ Tier 2 Funded status	125%	118%
Combined valuation payroll	$54,908	$53,574
Tier 1/Tier 2 UAL as a percentage of payroll	(305%)	(209%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(21.91%)	(16.87%)
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	Actuarial Valuation as of 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) RHIA	Actuarial Valuation as of December 31, 2013	Actuarial Valuation as of December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	54,908	53,574
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]	$215,724	$195,214
2. Employer reserves	526,263	452,483
3. Benefits in force reserve	104,847	100,928
4. Total market value of assets *(1. + 2. + 3.)*	**$846,834**	**$748,625**

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	$748,625
2.	Regular employer contributions	2,844
3.	Benefit payments and expense	(16,231)
4.	Adjustments[2]	7,412
5.	Interest credited	104,183
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$846,834**

[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	14,104	13,542
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$14,104**	**$13,542**

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	$14,104	$14,104	$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	338,936	307,510
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$338,936**	**$307,510**
Dormant Members	171,548	158,979
Retired Members and Beneficiaries	169,009	170,078
Total Actuarial Accrued Liability	**$679,493**	**$636,567**

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	$679,493	$679,493	$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	$679,493	$636,567
2. Actuarial value of assets	846,834	748,625
3. Unfunded accrued liability *(1. – 2.)*	(167,341)	(112,058)
4. Funded percentage *(2. ÷ 1.)*	125%	118%
5. Combined valuation payroll	$54,908	$53,574
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(305%)	(209%)

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	($167,341)	($12,112)
Total				**($167,341)**	**($12,112)**

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	$636,567
b. Normal cost at December 31, 2012	13,542
c. Benefit payments during 2013	(16,102)
d. Interest at 7.75% to December 31, 2013	49,759
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	683,766
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.)*	683,766
2. Actuarial accrued liability at December 31, 2013	679,493
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	4,273
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	748,625
b. Contributions for 2013[1]	2,844
c. Benefit payments and expenses during 2013	(16,231)
d. Interest at 7.75% to December 31, 2013	57,500
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	792,738
5. Actuarial value of assets at December 31, 2013	846,834
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	54,096
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$58,369**

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	**($112,058)**
2. Expected increase	3,086
3. Liability (gain)/loss	(4,273)
4. Asset (gain)/loss	(54,096)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($167,341)**

[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	14,104	54,908	25.69%	13,542	53,574	25.28%
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	**$14,104**	**$54,908**	**25.69%**	**$13,542**	**$53,574**	**25.28%**

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	($167,341)	($112,058)
2. Next year's Tier 1/Tier 2 UAL payment	(12,112)	(8,111)
3. Combined valuation payroll	54,908	53,574
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(22.06%)	(15.14%)

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	25.69%	25.28%
b. Tier 1/Tier 2 UAL rate	(22.06%)	(15.14%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	3.78%	10.27%

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	3.78%
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	(22.06%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(22.06%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	3.78%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	1.69%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	25.69%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	27.38%
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	27.38%	25.28%
b. Tier 1/Tier 2 UAL rate	(22.06%)	(17.00%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	5.47%	8.41%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$54,908	$0	$54,908
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	54,908	0	54,908
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$54,908**	**$0**	**$54,908**

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	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	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**	**1**	**0**	**3**	**2**	**1**	**0**	**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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54										
55-59										
60-64										
65-69						1				**1**
70-74										
75+										
Total	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54		
55-59	1	1,373
60-64		
65-69		
70-74		
75+		
Total	1	1,373

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74	1	1,344
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	1,344

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Oregon Community College Association/2685
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.

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
Oregon Community College Association/2685

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA	Scott D. Preppernau, FSA, EA
Principal and Consulting Actuary	Consulting Actuary

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Oregon Community College Association -- #2685

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Oregon Community College Association 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 Oregon Community College Association.

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 Oregon Community College Association

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.22%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(7.75%)	(7.75%)	(7.75%)
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%**	**0.19%**	**4.30%**
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%**	**0.64%**	**4.75%**

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 130%.

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	$1,231,401	$1,345,363	$113,962	92%	$345,098	33%
12/31/2009	1,319,113	1,244,519	(74,594)	106%	333,806	(22%)
12/31/2010	1,448,455	1,302,346	(146,109)	111%	351,534	(42%)
12/31/2011	1,413,315	1,307,049	(106,266)	108%	361,227	(29%)
12/31/2012	1,581,197	1,310,878	(270,319)	121%	379,961	(71%)
12/31/2013	1,769,162	1,361,219	(407,943)	130%	373,823	(109%)

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		
		OPSRP	
	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.

Oregon Community College Association

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($407,943)	($270,319)
Allocated pooled OPSRP UAL	26,432	26,781
Side account	0	0
Net unfunded pension actuarial accrued liability	(381,511)	(243,538)
Combined valuation payroll	373,823	379,961
Net pension UAL as a percentage of payroll	(102%)	(64%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,174	$7,972

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	$17,550	$17,607
Tier 1/Tier 2 valuation payroll	170,161	180,393
Tier 1/Tier 2 pension normal cost rate	13.22%	10.46%
Tier 1/ Tier 2 Actuarial accrued liability	$1,361,219	$1,310,878
Actuarial asset value	1,769,162	1,581,197
Tier 1/Tier 2 Unfunded actuarial accrued liability	(407,943)	(270,319)
Tier 1/ Tier 2 Funded status	130%	121%
Combined valuation payroll	$373,823	$379,961
Tier 1/Tier 2 UAL as a percentage of payroll	(109%)	(71%)
Tier 1/Tier 2 UAL rate	(7.75%)	(5.02%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	2	2
Tier 1/Tier 2 dormant members	2	2
Tier 1/Tier 2 retirees and beneficiaries	6	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	Actuarial Valuation as of 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) **RHIA**	Actuarial Valuation as of December 31, 2013	Actuarial Valuation as of December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	373,823	379,961
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]	$245,592	$254,816
2. Employer reserves	1,116,348	968,639
3. Benefits in force reserve	407,222	357,742
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,769,162**	**$1,581,197**

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	$1,581,197
2. Regular employer contributions	5,266
3. Benefit payments and expense	(63,040)
4. Adjustments [2]	10,973
5. Interest credited	234,766
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,769,162**

[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	17,550	17,607
Total	**$17,550**	**$17,607**

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	$17,550	$17,550	$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	212,255	251,018
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	423,533	396,652
▪ **Total Active Members**	**$635,788**	**$647,670**
Dormant Members	69,003	60,363
Retired Members and Beneficiaries	656,428	602,845
Total Actuarial Accrued Liability	**$1,361,219**	**$1,310,878**

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	$1,361,219	$1,361,219	$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	$1,361,219	$1,310,878
2. Actuarial value of assets	1,769,162	1,581,197
3. Unfunded accrued liability *(1. – 2.)*	(407,943)	(270,319)
4. Funded percentage *(2. ÷ 1.)*	130%	121%
5. Combined valuation payroll	$373,823	$379,961
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(109%)	(71%)

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	($407,943)	($29,527)
Total				**($407,943)**	**($29,527)**

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	$1,310,878
b. Normal cost at December 31, 2012	17,607
c. Benefit payments during 2013	(62,540)
d. Interest at 7.75% to December 31, 2013	100,534
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,366,479
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.)*	1,366,479
2. Actuarial accrued liability at December 31, 2013	1,361,219
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	5,260
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,581,197
b. Contributions for 2013[1]	5,266
c. Benefit payments and expenses during 2013	(63,040)
d. Interest at 7.75% to December 31, 2013	120,304
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,643,727
5. Actuarial value of assets at December 31, 2013	1,769,162
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	125,435
7. Total actuarial gain/(loss) *(3. + 6.)*	**$130,695**

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	**($270,319)**
2. Expected increase	(6,929)
3. Liability (gain)/loss	(5,260)
4. Asset (gain)/loss	(125,435)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($407,943)**

[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	17,550	170,161	10.31%	17,607	180,393	9.76%
Total	**$17,550**	**$170,161**	**10.31%**	**$17,607**	**$180,393**	**9.76%**

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	($407,943)	($270,319)
2. Next year's Tier 1/Tier 2 UAL payment	(29,527)	(19,566)
3. Combined valuation payroll	373,823	379,961
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(7.90%)	(5.15%)

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	10.31%	9.76%
b. Tier 1/Tier 2 UAL rate	(7.90%)	(5.15%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	2.56%	4.74%

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	130%
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	2.56%
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	(7.90%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(7.90%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	2.56%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	2.91%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	10.31%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.22%
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	13.22%	10.46%
b. Tier 1/Tier 2 UAL rate	(7.90%)	(5.15%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	5.47%	5.44%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	170,161	0	170,161
Tier 1/Tier 2 valuation payroll	170,161	0	170,161
OPSRP valuation payroll	203,662	0	203,662
Combined valuation payroll	**$373,823**	**$0**	**$373,823**

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	4	6	0	2	4	6
Police & Fire	0	0	0	0	0	0	0	0
Total	0	2	4	6	0	2	4	6
Active Members with previous service segments with the employer								
General Service	3	3	N/A	6	2	1	N/A	3
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	3	3	N/A	6	2	1	N/A	3
Dormant Members								
General Service	1	1	1	3	1	1	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	1	3	1	1	0	2
Retired Members and Beneficiaries								
General Service	6	0	0	6	5	0	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	6	0	0	6	5	0	0	5
Grand Total Number of Members	**10**	**6**	**5**	**21**	**8**	**4**	**4**	**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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49			1	1						**2**
50-54										
55-59										
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

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49	1	692
50-54	1	315
55-59		
60-64		
65-69		
70-74		
75+		
Total	2	504

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	669
60-64	2	1,123
65-69	1	563
70-74		
75-79	1	1,009
80-84	1	525
85-89		
90-94		
95-99		
100+		
Total	6	835

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members’ regular account balances starting in 2014. 7.75% compounded annually on members’ variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Oregon Municipal Electric Utilities Association/2876
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.

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
Oregon Municipal Electric Utilities Association/2876

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Oregon Municipal Electric Utilities Association -- #2876

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Oregon Municipal Electric Utilities Association 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 Oregon Municipal Electric Utilities Association.

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 Oregon Municipal Electric Utilities Association

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	9.97%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.16%)	(0.16%)	(0.16%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.42%**	**7.78%**	**11.89%**
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	**10.95%**	**8.23%**	**12.34%**

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 130%.

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	9.81%	9.81%
Minimum July 1, 2017 Rate	6.81%	3.81%
Maximum July 1, 2017 Rate	12.81%	15.81%

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	5,029	4,809	(220)	105%	92,028	0%
12/31/2013	18,644	14,353	(4,291)	130%	99,464	(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		
		OPSRP	
	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.

Oregon Municipal Electric Utilities Association

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	($4,291)	($220)
Allocated pooled OPSRP UAL	7,033	6,486
Side account	0	0
Net unfunded pension actuarial accrued liability	2,742	6,266
Combined valuation payroll	99,464	92,028
Net pension UAL as a percentage of payroll	3%	7%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,377	$1,931

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	$9,918	$9,141
Tier 1/Tier 2 valuation payroll	99,464	92,028
Tier 1/Tier 2 pension normal cost rate	9.97%	9.93%
Tier 1/ Tier 2 Actuarial accrued liability	$14,353	$4,809
Actuarial asset value	18,644	5,029
Tier 1/Tier 2 Unfunded actuarial accrued liability	(4,291)	(220)
Tier 1/ Tier 2 Funded status	130%	105%
Combined valuation payroll	$99,464	$92,028
Tier 1/Tier 2 UAL as a percentage of payroll	(4%)	0%
Tier 1/Tier 2 UAL rate	(0.16%)	0.11%
(includes Multnomah Fire District #10)		
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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	99,464	92,028
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	18,644	5,029
3. Benefits in force reserve	0	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$18,644**	**$5,029**

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	$5,029
2. Regular employer contributions	11,178
3. Benefit payments and expense	0
4. Adjustments [2]	(102)
5. Interest credited	2,540
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$18,644**

[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	9,918	9,141
Total	**$9,918**	**$9,141**

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	$9,918	$9,918	$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	14,353	4,809
▪ **Total Active Members**	**$14,353**	**$4,809**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$14,353**	**$4,809**

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	$14,353	$14,353	$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	$14,353	$4,809
2. Actuarial value of assets	18,644	5,029
3. Unfunded accrued liability *(1. – 2.)*	(4,291)	(220)
4. Funded percentage *(2. ÷ 1.)*	130%	105%
5. Combined valuation payroll	$99,464	$92,028
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(4%)	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	($4,291)	($311)
Total				**($4,291)**	**($311)**

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	$4,809
b. Normal cost at December 31, 2012	9,141
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	1,081
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	15,031
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.)*	15,031
2. Actuarial accrued liability at December 31, 2013	14,353
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	678
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	5,029
b. Contributions for 2013[1]	11,178
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	823
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	17,029
5. Actuarial value of assets at December 31, 2013	18,644
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	1,615
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$2,293**

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	**($220)**
2. Expected increase	(1,778)
3. Liability (gain)/loss	(678)
4. Asset (gain)/loss	(1,615)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($4,291)**

[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	9,918	99,464	9.97%	9,141	92,028	9.93%
Total	**$9,918**	**$99,464**	**9.97%**	**$9,141**	**$92,028**	**9.93%**

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	($4,291)	($220)
2. Next year's Tier 1/Tier 2 UAL payment	(311)	(16)
3. Combined valuation payroll	99,464	92,028
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.31%)	(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	9.97%	9.93%
b. Tier 1/Tier 2 UAL rate	(0.31%)	(0.02%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.81%	10.04%

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	9.81%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	9.81%
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	9.97%	9.93%
b. Tier 1/Tier 2 UAL rate	(0.31%)	(0.02%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	9.81%	10.04%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	99,464	0	99,464
Tier 1/Tier 2 valuation payroll	99,464	0	99,464
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$99,464**	**$0**	**$99,464**

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	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
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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<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

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members’ regular account balances starting in 2014. 7.75% compounded annually on members’ variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Owyhee Irrigation District/2533
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.

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
Owyhee Irrigation District/2533

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Owyhee Irrigation District -- #2533

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Owyhee Irrigation 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 Owyhee Irrigation 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 Owyhee Irrigation District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.43%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	8.66%	8.66%	8.66%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**22.70%**	**16.60%**	**20.71%**
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	**23.23%**	**17.05%**	**21.16%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

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	22.09%	22.09%
Minimum July 1, 2017 Rate	17.67%	13.25%
Maximum July 1, 2017 Rate	26.51%	30.93%

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	$4,902,840	$8,464,726	$3,561,886	58%	$1,128,948	316%
12/31/2009	5,363,864	8,428,446	3,064,582	64%	1,172,351	261%
12/31/2010	5,822,565	8,742,967	2,920,402	67%	1,218,051	240%
12/31/2011	5,806,866	8,836,456	3,029,590	66%	1,230,438	246%
12/31/2012	6,153,054	8,361,630	2,208,576	74%	1,221,590	181%
12/31/2013	7,013,954	8,601,934	1,587,980	82%	1,350,553	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		
		OPSRP	
	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.

Owyhee Irrigation District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	$1,587,980	$2,208,576
Allocated pooled OPSRP UAL	95,492	86,101
Side account	0	0
Net unfunded pension actuarial accrued liability	1,683,472	2,294,677
Combined valuation payroll	1,350,553	1,221,590
Net pension UAL as a percentage of payroll	125%	188%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$18,693	$25,629

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	$103,326	$113,171
Tier 1/Tier 2 valuation payroll	769,254	835,113
Tier 1/Tier 2 pension normal cost rate	13.43%	13.55%
Tier 1/ Tier 2 Actuarial accrued liability	$8,601,934	$8,361,630
Actuarial asset value	7,013,954	6,153,054
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,587,980	2,208,576
Tier 1/ Tier 2 Funded status	82%	74%
Combined valuation payroll	$1,350,553	$1,221,590
Tier 1/Tier 2 UAL as a percentage of payroll	118%	181%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	8.66%	13.22%
Tier 1/Tier 2 active members [1]	16	17
Tier 1/Tier 2 dormant members	1	0
Tier 1/Tier 2 retirees and beneficiaries	27	27

[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	Actuarial Valuation as of 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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	1,350,553	1,221,590
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]	$1,085,175	$970,910
2. Employer reserves	2,421,219	1,807,290
3. Benefits in force reserve	3,507,560	3,374,854
4. Total market value of assets ***(1. + 2. + 3.)***	**$7,013,954**	**$6,153,054**

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	$6,153,054
2.	Regular employer contributions	287,050
3.	Benefit payments and expense	(542,985)
4.	Adjustments[2]	209,765
5.	Interest credited	907,070
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$7,013,954**

[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	74,850	85,374
Tier 2 Police & Fire	0	0
Tier 2 General Service	28,476	27,797
Total	**$103,326**	**$113,171**

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	$103,326	$103,326	$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	2,061,067	2,256,278
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	457,772	418,257
▪ **Total Active Members**	**$2,518,839**	**$2,674,535**
Dormant Members	429,031	0
Retired Members and Beneficiaries	5,654,064	5,687,095
Total Actuarial Accrued Liability	**$8,601,934**	**$8,361,630**

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	$8,601,934	$8,601,934	$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	$8,601,934	$8,361,630
2. Actuarial value of assets	7,013,954	6,153,054
3. Unfunded accrued liability *(1. – 2.)*	1,587,980	2,208,576
4. Funded percentage *(2. ÷ 1.)*	82%	74%
5. Combined valuation payroll	$1,350,553	$1,221,590
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	118%	181%

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	$1,587,980	$114,938
Total				**$1,587,980**	**$114,938**

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	$8,361,630
b. Normal cost at December 31, 2012	113,171
c. Benefit payments during 2013	(538,678)
d. Interest at 7.75% to December 31, 2013	635,923
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	8,572,046
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.)*	8,572,046
2. Actuarial accrued liability at December 31, 2013	8,601,934
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(29,888)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	6,153,054
b. Contributions for 2013[1]	287,050
c. Benefit payments and expenses during 2013	(542,985)
d. Interest at 7.75% to December 31, 2013	466,944
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	6,364,063
5. Actuarial value of assets at December 31, 2013	7,013,954
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	649,891
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$620,003**

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	**$2,208,576**
2. Expected increase	(593)
3. Liability (gain)/loss	29,888
4. Asset (gain)/loss	(649,891)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$1,587,980**

[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	74,850	520,800	14.37%	85,374	587,431	14.53%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	28,476	248,454	11.46%	27,797	247,682	11.22%
Total	**$103,326**	**$769,254**	**13.43%**	**$113,171**	**$835,113**	**13.55%**

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	$1,587,980	$2,208,576
2. Next year's Tier 1/Tier 2 UAL payment	114,938	159,856
3. Combined valuation payroll	1,350,553	1,221,590
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	8.51%	13.09%

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	13.43%	13.55%
b. Tier 1/Tier 2 UAL rate	8.51%	13.09%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	22.09%	26.77%

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	23.77%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	23.77%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	4.75%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	4.75%
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.)*	4.75%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	19.02%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	28.52%
7. July 1, 2015 total pension rate, before adjustment	22.09%
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	8.51%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	8.51%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	22.09%
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	13.43%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.43%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	22.09%

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	13.43%	13.55%
b. Tier 1/Tier 2 UAL rate	8.51%	13.09%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	22.09%	26.77%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$520,800	$0	$520,800
Tier 2	248,454	0	248,454
Tier 1/Tier 2 valuation payroll	769,254	0	769,254
OPSRP valuation payroll	581,299	0	581,299
Combined valuation payroll	**$1,350,553**	**$0**	**$1,350,553**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	11	5	16	32	12	5	11	28
Police & Fire	0	0	0	0	0	0	0	0
Total	11	5	16	32	12	5	11	28
Active Members with previous service segments with the employer								
General Service	3	1	N/A	4	3	1	N/A	4
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	3	1	N/A	4	3	1	N/A	4
Dormant Members								
General Service	1	0	1	2	0	0	1	1
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	1	2	0	0	1	1
Retired Members and Beneficiaries								
General Service	26	1	1	28	26	1	1	28
Police & Fire	0	0	0	0	0	0	0	0
Total	26	1	1	28	26	1	1	28
Grand Total Number of Members	**41**	**7**	**18**	**66**	**41**	**7**	**13**	**61**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34										
35-39										
40-44			1							**1**
45-49										
50-54				2	3	1				**6**
55-59			2		2	1				**5**
60-64				1	2					**3**
65-69		1								**1**
70-74										
75+										
Total	**0**	**1**	**3**	**3**	**7**	**2**	**0**	**0**	**0**	**16**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54		
55-59		
60-64		
65-69	1	3,289
70-74		
75+		
Total	1	3,289

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	2,672
55-59	1	1,783
60-64	2	2,990
65-69	6	1,932
70-74	4	2,345
75-79	6	702
80-84	4	1,532
85-89	3	674
90-94		
95-99		
100+		
Total	27	1,621

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members’ regular account balances starting in 2014. 7.75% compounded annually on members’ variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Polk County Fire District #1/2688
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.

Milliman

September 2014
Polk County Fire District #1/2688

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
Polk County Fire District #1/2688

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Polk County Fire District #1 -- #2688

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Polk County Fire District #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 Polk County Fire District #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 Polk County Fire District #1

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.15%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	2.15%	2.15%	2.15%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**17.91%**	**10.09%**	**14.20%**
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	**18.44%**	**10.54%**	**14.65%**

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 89%.

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	17.30%	17.30%
Minimum July 1, 2017 Rate	13.84%	10.38%
Maximum July 1, 2017 Rate	20.76%	24.22%

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	$2,136,782	$2,708,464	$571,682	79%	$977,015	59%
12/31/2009	2,498,792	2,879,399	380,607	87%	1,023,760	37%
12/31/2010	2,752,119	3,185,564	433,445	86%	1,099,325	39%
12/31/2011	2,877,755	3,340,925	463,170	86%	1,112,055	42%
12/31/2012	3,362,223	3,697,465	335,242	91%	1,132,943	30%
12/31/2013	3,617,028	4,043,451	426,423	89%	924,111	46%

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		
		OPSRP	
	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.

Polk County Fire District #1

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$426,423	$335,242
Allocated pooled OPSRP UAL	65,340	79,853
Side account	0	0
Net unfunded pension actuarial accrued liability	491,763	415,095
Combined valuation payroll	924,111	1,132,943
Net pension UAL as a percentage of payroll	53%	37%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,791	$23,770

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	$82,484	$100,685
Tier 1/Tier 2 valuation payroll	544,423	660,907
Tier 1/Tier 2 pension normal cost rate	15.15%	15.23%
Tier 1/ Tier 2 Actuarial accrued liability	$4,043,451	$3,697,465
Actuarial asset value	3,617,028	3,362,223
Tier 1/Tier 2 Unfunded actuarial accrued liability	426,423	335,242
Tier 1/ Tier 2 Funded status	89%	91%
Combined valuation payroll	$924,111	$1,132,943
Tier 1/Tier 2 UAL as a percentage of payroll	46%	30%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	2.15%	2.07%
Tier 1/Tier 2 active members[1]	7	8
Tier 1/Tier 2 dormant members	5	6
Tier 1/Tier 2 retirees and beneficiaries	13	11

[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	Actuarial Valuation as of 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) RHIA	Actuarial Valuation as of December 31, 2013	Actuarial Valuation as of December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	924,111	1,132,943
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]	$316,944	$536,106
2. Employer reserves	2,346,190	2,211,274
3. Benefits in force reserve	953,894	614,842
4. Total market value of assets ***(1. + 2. + 3.)***	**$3,617,028**	**$3,362,223**

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	$3,362,223
2.	Regular employer contributions	90,472
3.	Benefit payments and expense	(147,667)
4.	Adjustments[2]	(173,009)
5.	Interest credited	485,010
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$3,617,028**

[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	$15,805
Tier 1 General Service	0	0
Tier 2 Police & Fire	74,474	76,970
Tier 2 General Service	8,010	7,910
Total	**$82,484**	**$100,685**

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	$82,484	$82,484	$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	$605,752	$572,677
▪ Tier 1 General Service	200,474	189,132
▪ Tier 2 Police & Fire	1,029,259	964,558
▪ Tier 2 General Service	186,183	170,044
▪ **Total Active Members**	**$2,021,668**	**$1,896,411**
Dormant Members	484,139	764,959
Retired Members and Beneficiaries	1,537,644	1,036,095
Total Actuarial Accrued Liability	**$4,043,451**	**$3,697,465**

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	$4,043,451	$4,043,451	$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	$4,043,451	$3,697,465
2. Actuarial value of assets	3,617,028	3,362,223
3. Unfunded accrued liability *(1. – 2.)*	426,423	335,242
4. Funded percentage *(2. ÷ 1.)*	89%	91%
5. Combined valuation payroll	$924,111	$1,132,943
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	46%	30%

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	$426,423	$30,864
Total				**$426,423**	**$30,864**

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	$3,697,465
b. Normal cost at December 31, 2012	100,685
c. Benefit payments during 2013	(146,496)
d. Interest at 7.75% to December 31, 2013	288,680
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	3,940,334
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.)*	3,940,334
2. Actuarial accrued liability at December 31, 2013	4,043,451
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(103,117)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	3,362,223
b. Contributions for 2013[1]	90,472
c. Benefit payments and expenses during 2013	(147,667)
d. Interest at 7.75% to December 31, 2013	258,356
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	3,563,383
5. Actuarial value of assets at December 31, 2013	3,617,028
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	53,645
7. Total actuarial gain/(loss) *(3. + 6.)*	**($49,472)**

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	**$335,242**
2. Expected increase	41,709
3. Liability (gain)/loss	103,117
4. Asset (gain)/loss	(53,645)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$426,423**

[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%	$15,805	$98,681	16.02%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	74,474	482,068	15.45%	76,970	501,263	15.36%
Tier 2 General Service	8,010	62,355	12.85%	7,910	60,963	12.98%
Total	**$82,484**	**$544,423**	**15.15%**	**$100,685**	**$660,907**	**15.23%**

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	$426,423	$335,242
2. Next year's Tier 1/Tier 2 UAL payment	30,864	24,265
3. Combined valuation payroll	924,111	1,132,943
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.34%	2.14%

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	15.15%	15.23%
b. Tier 1/Tier 2 UAL rate	3.34%	2.14%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	18.64%	17.50%

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	14.30%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	14.30%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.86%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	89%
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%)*	11.30%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	17.30%
7. July 1, 2015 total pension rate, before adjustment	18.64%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(1.34%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.34%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	2.00%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	17.30%
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	15.15%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.15%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	17.30%

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	15.15%	15.23%
b. Tier 1/Tier 2 UAL rate	2.00%	1.94%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	17.30%	17.30%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	62,355	482,068	544,423
Tier 1/Tier 2 valuation payroll	62,355	482,068	544,423
OPSRP valuation payroll	31,806	347,882	379,688
Combined valuation payroll	**$94,161**	**$829,950**	**$924,111**

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	1	2	0	1	1	2
Police & Fire	0	6	6	12	1	6	6	13
Total	0	7	7	14	1	7	7	15
Active Members with previous service segments with the employer								
General Service	7	3	N/A	10	2	1	N/A	3
Police & Fire	6	3	N/A	9	4	2	N/A	6
Total	13	6	N/A	19	6	3	N/A	9
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	5	0	0	5	5	1	0	6
Total	5	0	0	5	5	1	0	6
Retired Members and Beneficiaries								
General Service	4	0	0	4	3	1	0	4
Police & Fire	9	0	1	10	7	0	0	7
Total	13	0	1	14	10	1	0	11
Grand Total Number of Members	**31**	**13**	**8**	**52**	**22**	**12**	**7**	**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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39			2							**2**
40-44		1		1						**2**
45-49				1						**1**
50-54			1							**1**
55-59										
60-64			1							**1**
65-69										
70-74										
75+										
Total	**0**	**1**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**7**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44	1	95
45-49		
50-54	2	1,287
55-59	2	498
60-64		
65-69		
70-74		
75+		
Total	5	733

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	44
60-64	7	901
65-69	5	711
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	13	762

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Polk County/2037
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.

Milliman

September 2014
Polk County/2037

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
Polk County/2037

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Polk County -- #2037

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Polk 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 Polk 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 Polk County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.26%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	1.73%	1.73%	1.73%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**16.60%**	**9.67%**	**13.78%**
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	**17.13%**	**10.12%**	**14.23%**

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 90%.

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	15.99%	15.99%
Minimum July 1, 2017 Rate	12.79%	9.59%
Maximum July 1, 2017 Rate	19.19%	22.39%

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	$49,132,014	$66,614,193	$17,482,179	74%	$12,760,103	137%
12/31/2009	55,947,719	69,680,804	13,733,085	80%	13,126,561	105%
12/31/2010	59,956,853	72,381,493	12,424,640	83%	13,663,943	91%
12/31/2011	59,227,350	75,481,554	16,254,204	78%	14,950,846	109%
12/31/2012	64,520,822	76,733,759	12,212,937	84%	14,922,763	82%
12/31/2013	71,511,022	79,488,788	7,977,766	90%	14,698,729	54%

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		
		OPSRP	
	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.

Polk County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$7,977,766	$12,212,937
Allocated pooled OPSRP UAL	1,039,290	1,051,797
Side account	0	0
Net unfunded pension actuarial accrued liability	9,017,056	13,264,734
Combined valuation payroll	14,698,729	14,922,763
Net pension UAL as a percentage of payroll	61%	89%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$203,446	$313,086

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	$1,148,518	$1,171,314
Tier 1/Tier 2 valuation payroll	8,052,105	8,423,087
Tier 1/Tier 2 pension normal cost rate	14.26%	13.91%
Tier 1/ Tier 2 Actuarial accrued liability	$79,488,788	$76,733,759
Actuarial asset value	71,511,022	64,520,822
Tier 1/Tier 2 Unfunded actuarial accrued liability	7,977,766	12,212,937
Tier 1/ Tier 2 Funded status	90%	84%
Combined valuation payroll	$14,698,729	$14,922,763
Tier 1/Tier 2 UAL as a percentage of payroll	54%	82%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	1.73%	2.08%
Tier 1/Tier 2 active members [1]	127	137
Tier 1/Tier 2 dormant members	100	107
Tier 1/Tier 2 retirees and beneficiaries	372	344

[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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	14,698,729	14,922,763
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]	$10,642,046	$10,661,853
2. Employer reserves	32,952,593	28,753,493
3. Benefits in force reserve	27,916,383	25,105,476
4. Total market value of assets ***(1. + 2. + 3.)***	**$71,511,022**	**$64,520,822**

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	$64,520,822
2.	Regular employer contributions	1,214,590
3.	Benefit payments and expense	(4,321,573)
4.	Adjustments[2]	770,706
5.	Interest credited	9,326,478
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$71,511,022**

[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	$183,070	$173,856
Tier 1 General Service	318,664	307,394
Tier 2 Police & Fire	326,338	342,471
Tier 2 General Service	320,446	347,593
Total	**$1,148,518**	**$1,171,314**

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	$1,148,518	$1,148,518	$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	$4,405,627	$4,190,921
▪ Tier 1 General Service	12,803,220	13,031,307
▪ Tier 2 Police & Fire	5,095,391	4,989,813
▪ Tier 2 General Service	7,436,885	7,159,650
▪ **Total Active Members**	**$29,741,123**	**$29,371,691**
Dormant Members	4,747,437	5,055,875
Retired Members and Beneficiaries	45,000,228	42,306,193
Total Actuarial Accrued Liability	**$79,488,788**	**$76,733,759**

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	$79,488,788	$79,488,788	$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	$79,488,788	$76,733,759
2. Actuarial value of assets	71,511,022	64,520,822
3. Unfunded accrued liability *(1. – 2.)*	7,977,766	12,212,937
4. Funded percentage *(2. ÷ 1.)*	90%	84%
5. Combined valuation payroll	$14,698,729	$14,922,763
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	54%	82%

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	$7,977,766	$577,430
Total				**$7,977,766**	**$577,430**

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	$76,733,759
b. Normal cost at December 31, 2012	1,171,314
c. Benefit payments during 2013	(4,287,296)
d. Interest at 7.75% to December 31, 2013	5,871,510
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	79,489,287
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.)*	79,489,287
2. Actuarial accrued liability at December 31, 2013	79,488,788
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	499
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	64,520,822
b. Contributions for 2013[1]	1,214,590
c. Benefit payments and expenses during 2013	(4,321,573)
d. Interest at 7.75% to December 31, 2013	4,879,968
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	66,293,806
5. Actuarial value of assets at December 31, 2013	71,511,022
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	5,217,216
7. Total actuarial gain/(loss) *(3. + 6.)*	**$5,217,715**

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	**$12,212,937**
2. Expected increase	982,544
3. Liability (gain)/loss	(499)
4. Asset (gain)/loss	(5,217,216)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$7,977,766**

[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	$183,070	$956,661	19.14%	$173,856	$912,552	19.05%
Tier 1 General Service	318,664	2,042,119	15.60%	307,394	2,072,380	14.83%
Tier 2 Police & Fire	326,338	2,027,056	16.10%	342,471	2,119,671	16.16%
Tier 2 General Service	320,446	3,026,269	10.59%	347,593	3,318,484	10.47%
Total	**$1,148,518**	**$8,052,105**	**14.26%**	**$1,171,314**	**$8,423,087**	**13.91%**

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	$7,977,766	$12,212,937
2. Next year's Tier 1/Tier 2 UAL payment	577,430	883,971
3. Combined valuation payroll	14,698,729	14,922,763
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.93%	5.92%

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	14.26%	13.91%
b. Tier 1/Tier 2 UAL rate	3.93%	5.92%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	18.34%	19.96%

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	12.99%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	12.99%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.60%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	90%
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%)*	9.99%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	15.99%
7. July 1, 2015 total pension rate, before adjustment	18.34%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.35%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.93%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	1.58%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	15.99%
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	14.26%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.26%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	15.99%

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	14.26%	13.91%
b. Tier 1/Tier 2 UAL rate	1.58%	1.95%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	15.99%	15.99%
(a. + b. + c., minimum of 5.47%)		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$2,042,119	$956,661	$2,998,780
Tier 2	3,026,269	2,027,056	5,053,325
Tier 1/Tier 2 valuation payroll	5,068,388	2,983,717	8,052,105
OPSRP valuation payroll	5,838,994	807,630	6,646,624
Combined valuation payroll	**$10,907,382**	**$3,791,347**	**$14,698,729**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	34	54	122	210	33	60	121	214
Police & Fire	12	27	13	52	13	31	12	56
Total	46	81	135	262	46	91	133	270
Active Members with previous service segments with the employer								
General Service	79	55	N/A	134	50	26	N/A	76
Police & Fire	12	15	N/A	27	10	5	N/A	15
Total	91	70	N/A	161	60	31	N/A	91
Dormant Members								
General Service	46	45	15	106	53	46	8	107
Police & Fire	5	4	1	10	5	3	1	9
Total	51	49	16	116	58	49	9	116
Retired Members and Beneficiaries								
General Service	304	15	1	320	275	18	1	294
Police & Fire	52	1	0	53	49	2	0	51
Total	356	16	1	373	324	20	1	345
Grand Total Number of Members	**544**	**216**	**152**	**912**	**488**	**191**	**143**	**822**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34		2	4							**6**
35-39			11	4						**15**
40-44			11	8						**19**
45-49			12	8	5	1				**26**
50-54			8	7	5	2				**22**
55-59			7	5	6	2				**20**
60-64			6	4	3	2	1			**16**
65-69				1	2					**3**
70-74										
75+										
Total	**0**	**2**	**59**	**37**	**21**	**7**	**1**	**0**	**0**	**127**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34	2	707
35-39	11	585
40-44	14	531
45-49	13	880
50-54	17	664
55-59	19	592
60-64	13	301
65-69	8	242
70-74	2	388
75+	1	9
Total	100	559

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	3	39
45-49	3	1,446
50-54	1	2,279
55-59	29	837
60-64	71	971
65-69	98	1,030
70-74	62	994
75-79	45	962
80-84	31	676
85-89	21	742
90-94	6	511
95-99	2	456
100+		
Total	372	931

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members’ regular account balances starting in 2014. 7.75% compounded annually on members’ variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Polk Soil & Water Conservation District/2613
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.

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.

Milliman

September 2014
Polk Soil & Water Conservation District/2613

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman’s prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman’s consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman’s advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Polk Soil & Water Conservation District -- #2613

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Polk Soil & 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 Polk Soil & 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 Polk Soil & Water Conservation District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.88%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.37%)	(0.37%)	(0.37%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.12%**	**7.57%**	**11.68%**
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	**14.65%**	**8.02%**	**12.13%**

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 92%.

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	13.51%	13.51%
Minimum July 1, 2017 Rate	10.51%	7.51%
Maximum July 1, 2017 Rate	16.51%	19.51%

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	$300,593	$316,733	$16,140	95%	$239,349	7%
12/31/2009	286,697	389,879	103,182	74%	296,506	35%
12/31/2010	295,692	404,871	109,179	73%	207,679	53%
12/31/2011	287,707	412,046	124,339	70%	188,085	66%
12/31/2012	322,307	440,320	118,013	73%	218,163	54%
12/31/2013	360,579	392,394	31,815	92%	198,395	16%

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		
		OPSRP	
	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.

Polk Soil & Water Conservation District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$31,815	$118,013
Allocated pooled OPSRP UAL	14,028	15,377
Side account	0	0
Net unfunded pension actuarial accrued liability	45,843	133,390
Combined valuation payroll	198,395	218,163
Net pension UAL as a percentage of payroll	23%	61%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,746	$4,577

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	$4,503	$6,698
Tier 1/Tier 2 valuation payroll	32,450	74,995
Tier 1/Tier 2 pension normal cost rate	13.88%	8.93%
Tier 1/ Tier 2 Actuarial accrued liability	$392,394	$440,320
Actuarial asset value	360,579	322,307
Tier 1/Tier 2 Unfunded actuarial accrued liability	31,815	118,013
Tier 1/ Tier 2 Funded status	92%	73%
Combined valuation payroll	$198,395	$218,163
Tier 1/Tier 2 UAL as a percentage of payroll	16%	54%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(0.37%)	4.05%
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	1	2
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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	198,395	218,163
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]	$47,863	$42,874
2. Employer reserves	149,856	123,387
3. Benefits in force reserve	162,861	156,046
4. Total market value of assets ***(1. + 2. + 3.)***	**$360,579**	**$322,307**

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	$322,307
2.	Regular employer contributions	6,423
3.	Benefit payments and expense	(25,212)
4.	Adjustments [2]	10,196
5.	Interest credited	46,865
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$360,579**

[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	4,503	6,698
Total	**$4,503**	**$6,698**

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	$4,503	$4,503	$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	44,493	42,734
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	81,965	131,194
▪ **Total Active Members**	**$126,458**	**$173,928**
Dormant Members	3,410	3,433
Retired Members and Beneficiaries	262,526	262,959
Total Actuarial Accrued Liability	**$392,394**	**$440,320**

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	$392,394	$392,394	$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	$392,394	$440,320
2. Actuarial value of assets	360,579	322,307
3. Unfunded accrued liability *(1. – 2.)*	31,815	118,013
4. Funded percentage *(2. ÷ 1.)*	92%	73%
5. Combined valuation payroll	$198,395	$218,163
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	16%	54%

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	$31,815	$2,303
Total				**$31,815**	**$2,303**

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	$440,320
b. Normal cost at December 31, 2012	6,698
c. Benefit payments during 2013	(25,012)
d. Interest at 7.75% to December 31, 2013	33,675
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	455,681
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.)*	455,681
2. Actuarial accrued liability at December 31, 2013	392,394
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	63,287
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	322,307
b. Contributions for 2013[1]	6,423
c. Benefit payments and expenses during 2013	(25,212)
d. Interest at 7.75% to December 31, 2013	24,251
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	327,769
5. Actuarial value of assets at December 31, 2013	360,579
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	32,810
7. Total actuarial gain/(loss) *(3. + 6.)*	**$96,097**

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	**$118,013**
2. Expected increase	9,899
3. Liability (gain)/loss	(63,287)
4. Asset (gain)/loss	(32,810)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$31,815**

[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	4,503	32,450	13.88%	6,698	74,995	8.93%
Total	**$4,503**	**$32,450**	**13.88%**	**$6,698**	**$74,995**	**8.93%**

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	$31,815	$118,013
2. Next year's Tier 1/Tier 2 UAL payment	2,303	8,542
3. Combined valuation payroll	198,395	218,163
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	1.16%	3.92%

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	13.88%	8.93%
b. Tier 1/Tier 2 UAL rate	1.16%	3.92%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.19%	12.98%

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	10.51%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.51%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.10%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	92%
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%)*	7.51%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.51%
7. July 1, 2015 total pension rate, before adjustment	15.19%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(1.68%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	1.16%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.52%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.51%
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	13.88%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.88%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.51%

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	13.88%	8.93%
b. Tier 1/Tier 2 UAL rate	(0.52%)	3.92%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	13.51%	12.98%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	32,450	0	32,450
Tier 1/Tier 2 valuation payroll	32,450	0	32,450
OPSRP valuation payroll	165,945	0	165,945
Combined valuation payroll	**$198,395**	**$0**	**$198,395**

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	5	6	0	1	5	6
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	5	6	0	1	5	6
Active Members with previous service segments with the employer								
General Service	1	2	N/A	3	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	1	2	N/A	3	0	0	N/A	0
Dormant Members								
General Service	0	1	2	3	0	2	1	3
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	2	3	0	2	1	3
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**	**4**	**7**	**13**	**1**	**3**	**6**	**10**

[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

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<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

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39	1	138
40-44		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75+		
Total	1	138

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74	1	2,050
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	2,050

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Port of Astoria/2507
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
Port of Astoria/2507

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.

Milliman

September 2014
Port of Astoria/2507

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Port of Astoria -- #2507

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Port of Astoria 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 Port of Astoria.

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 Port of Astoria

	Payroll		
		OPSRP	
	Tier 1/Tier 2	**General Service**	**Police & Fire**
Pension			
Normal cost rate	9.82%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.42%	0.42%	0.42%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.85%**	**8.36%**	**12.47%**
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	**11.38%**	**8.81%**	**12.92%**

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	10.24%	10.24%
Minimum July 1, 2017 Rate	7.24%	4.24%
Maximum July 1, 2017 Rate	13.24%	16.24%

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	$3,900,762	$5,018,649	$1,117,887	78%	$812,180	138%
12/31/2009	4,374,426	5,245,303	870,877	83%	885,928	98%
12/31/2010	4,723,404	5,478,397	754,993	86%	1,217,796	62%
12/31/2011	4,672,295	5,646,482	974,187	83%	1,358,257	72%
12/31/2012	5,195,703	5,444,429	248,726	95%	1,487,753	17%
12/31/2013	5,438,787	5,486,807	48,020	99%	1,294,017	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		
		OPSRP	
	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.

Port of Astoria

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$48,020	$248,726
Allocated pooled OPSRP UAL	91,495	104,861
Side account	0	0
Net unfunded pension actuarial accrued liability	139,515	353,587
Combined valuation payroll	1,294,017	1,487,753
Net pension UAL as a percentage of payroll	11%	24%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,911	$31,214

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	$25,641	$62,329
Tier 1/Tier 2 valuation payroll	261,020	493,607
Tier 1/Tier 2 pension normal cost rate	9.82%	12.63%
Tier 1/ Tier 2 Actuarial accrued liability	$5,486,807	$5,444,429
Actuarial asset value	5,438,787	5,195,703
Tier 1/Tier 2 Unfunded actuarial accrued liability	48,020	248,726
Tier 1/ Tier 2 Funded status	99%	95%
Combined valuation payroll	$1,294,017	$1,487,753
Tier 1/Tier 2 UAL as a percentage of payroll	4%	17%
Tier 1/Tier 2 UAL rate	0.42%	0.65%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	4	8
Tier 1/Tier 2 dormant members	4	2
Tier 1/Tier 2 retirees and beneficiaries	31	30

[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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	1,294,017	1,487,753
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]	$309,628	$680,761
2. Employer reserves	2,361,474	2,330,418
3. Benefits in force reserve	2,767,685	2,184,524
4. Total market value of assets ***(1. + 2. + 3.)***	**$5,438,787**	**$5,195,703**

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	$5,195,703
2.	Regular employer contributions	116,416
3.	Benefit payments and expense	(428,449)
4.	Adjustments [2]	(187,296)
5.	Interest credited	742,413
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$5,438,787**

[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	32,864
Tier 2 Police & Fire	0	0
Tier 2 General Service	25,641	29,465
Total	**$25,641**	**$62,329**

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	$25,641	$25,641	$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	414,404	1,307,081
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	429,031	423,137
▪ **Total Active Members**	**$843,435**	**$1,730,218**
Dormant Members	181,961	32,987
Retired Members and Beneficiaries	4,461,411	3,681,224
Total Actuarial Accrued Liability	**$5,486,807**	**$5,444,429**

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	$5,486,807	$5,486,807	$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	$5,486,807	$5,444,429
2. Actuarial value of assets	5,438,787	5,195,703
3. Unfunded accrued liability *(1. – 2.)*	48,020	248,726
4. Funded percentage *(2. ÷ 1.)*	99%	95%
5. Combined valuation payroll	$1,294,017	$1,487,753
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	4%	17%

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	$48,020	$3,476
Total				**$48,020**	**$3,476**

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	$5,444,429
b. Normal cost at December 31, 2012	62,329
c. Benefit payments during 2013	(425,051)
d. Interest at 7.75% to December 31, 2013	410,303
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	5,492,010
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.)*	5,492,010
2. Actuarial accrued liability at December 31, 2013	5,486,807
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	5,203
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	5,195,703
b. Contributions for 2013[1]	116,416
c. Benefit payments and expenses during 2013	(428,449)
d. Interest at 7.75% to December 31, 2013	390,576
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	5,274,245
5. Actuarial value of assets at December 31, 2013	5,438,787
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	164,542
7. Total actuarial gain/(loss) *(3. + 6.)*	**$169,745**

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	**$248,726**
2. Expected increase	(30,961)
3. Liability (gain)/loss	(5,203)
4. Asset (gain)/loss	(164,542)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$48,020**

[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%	32,864	194,242	16.92%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	25,641	261,020	9.82%	29,465	299,365	9.84%
Total	**$25,641**	**$261,020**	**9.82%**	**$62,329**	**$493,607**	**12.63%**

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	$48,020	$248,726
2. Next year's Tier 1/Tier 2 UAL payment	3,476	18,003
3. Combined valuation payroll	1,294,017	1,487,753
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.27%	1.21%

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	9.82%	12.63%
b. Tier 1/Tier 2 UAL rate	0.27%	1.21%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	10.24%	13.97%

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	10.28%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.28%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.06%
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%)*	7.28%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.28%
7. July 1, 2015 total pension rate, before adjustment	10.24%
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	0.27%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.27%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	10.24%
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	9.82%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	9.82%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	10.24%

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	9.82%	12.63%
b. Tier 1/Tier 2 UAL rate	0.27%	0.52%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	10.24%	13.28%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	261,020	0	261,020
Tier 1/Tier 2 valuation payroll	261,020	0	261,020
OPSRP valuation payroll	1,032,997	0	1,032,997
Combined valuation payroll	**$1,294,017**	**$0**	**$1,294,017**

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	4	23	27	3	5	26	34
Police & Fire	0	0	0	0	0	0	0	0
Total	0	4	23	27	3	5	26	34
Active Members with previous service segments with the employer								
General Service	5	0	N/A	5	6	0	N/A	6
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	5	0	N/A	5	6	0	N/A	6
Dormant Members								
General Service	1	3	3	7	0	2	2	4
Police & Fire	0	0	0	0	0	0	0	0
Total	1	3	3	7	0	2	2	4
Retired Members and Beneficiaries								
General Service	26	3	0	29	23	5	0	28
Police & Fire	2	0	0	2	2	0	0	2
Total	28	3	0	31	25	5	0	30
Grand Total Number of Members	**34**	**10**	**26**	**70**	**34**	**12**	**28**	**74**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34										
35-39										
40-44			1							**1**
45-49			1							**1**
50-54			1							**1**
55-59										
60-64			1							**1**
65-69										
70-74										
75+										
Total	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54	1	388
55-59	1	717
60-64	2	496
65-69		
70-74		
75+		
Total	4	524

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	4	1,712
60-64	8	835
65-69	8	610
70-74	4	2,051
75-79	3	794
80-84	1	2,545
85-89	1	284
90-94	1	1,525
95-99	1	849
100+		
Total	31	1,103

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Port of Cascade Locks/2633
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.

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
Port of Cascade Locks/2633

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Port of Cascade Locks -- #2633

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Port of Cascade Locks 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 Port of Cascade Locks.

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 Port of Cascade Locks

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.64%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(5.89%)	(5.89%)	(5.89%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**6.36%**	**2.05%**	**6.16%**
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	**6.89%**	**2.50%**	**6.61%**

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 108%.

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	5.75%	5.75%
Minimum July 1, 2017 Rate	2.75%	0.00%
Maximum July 1, 2017 Rate	8.75%	11.75%

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	$4,678,329	$5,108,992	$430,663	92%	$548,853	78%
12/31/2009	5,074,370	5,123,060	48,690	99%	547,818	9%
12/31/2010	5,420,488	5,350,182	(70,306)	101%	593,226	(12%)
12/31/2011	5,389,060	5,535,473	146,413	97%	627,202	23%
12/31/2012	5,740,612	5,705,510	(35,102)	101%	427,714	(8%)
12/31/2013	6,273,515	5,803,343	(470,172)	108%	447,857	(105%)

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		
		OPSRP	
	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.

Port of Cascade Locks

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($470,172)	($35,102)
Allocated pooled OPSRP UAL	31,666	30,146
Side account	0	0
Net unfunded pension actuarial accrued liability	(438,506)	(4,956)
Combined valuation payroll	447,857	427,714
Net pension UAL as a percentage of payroll	(98%)	(1%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,199	$8,974

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	$20,699	$26,161
Tier 1/Tier 2 valuation payroll	177,812	233,319
Tier 1/Tier 2 pension normal cost rate	11.64%	11.21%
Tier 1/ Tier 2 Actuarial accrued liability	$5,803,343	$5,705,510
Actuarial asset value	6,273,515	5,740,612
Tier 1/Tier 2 Unfunded actuarial accrued liability	(470,172)	(35,102)
Tier 1/ Tier 2 Funded status	108%	101%
Combined valuation payroll	$447,857	$427,714
Tier 1/Tier 2 UAL as a percentage of payroll	(105%)	(8%)
Tier 1/Tier 2 UAL rate	(5.89%)	(0.46%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	4	5
Tier 1/Tier 2 dormant members	14	16
Tier 1/Tier 2 retirees and beneficiaries	31	30

[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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	447,857	427,714
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]	$860,289	$896,479
2. Employer reserves	3,274,563	2,926,338
3. Benefits in force reserve	2,138,663	1,917,794
4. Total market value of assets *(1. + 2. + 3.)*	**$6,273,515**	**$5,740,612**

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	$5,740,612
2. Regular employer contributions	17,412
3. Benefit payments and expense	(331,074)
4. Adjustments[2]	37,440
5. Interest credited	809,125
6. Total transferred from side accounts	0
7. Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)*	**$6,273,515**

[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	20,699	26,161
Total	**$20,699**	**$26,161**

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	$20,699	$20,699	$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	298,752	289,638
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	398,366	401,092
▪ **Total Active Members**	**$697,118**	**$690,730**
Dormant Members	1,658,775	1,783,032
Retired Members and Beneficiaries	3,447,450	3,231,748
Total Actuarial Accrued Liability	**$5,803,343**	**$5,705,510**

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	$5,803,343	$5,803,343	$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	$5,803,343	$5,705,510
2. Actuarial value of assets	6,273,515	5,740,612
3. Unfunded accrued liability *(1. – 2.)*	(470,172)	(35,102)
4. Funded percentage *(2. ÷ 1.)*	108%	101%
5. Combined valuation payroll	$447,857	$427,714
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(105%)	(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	($470,172)	($34,031)
Total				**($470,172)**	**($34,031)**

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	$5,705,510
b. Normal cost at December 31, 2012	26,161
c. Benefit payments during 2013	(328,448)
d. Interest at 7.75% to December 31, 2013	431,477
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	5,834,700
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.)*	5,834,700
2. Actuarial accrued liability at December 31, 2013	5,803,343
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	31,357
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	5,740,612
b. Contributions for 2013[1]	17,412
c. Benefit payments and expenses during 2013	(331,074)
d. Interest at 7.75% to December 31, 2013	432,743
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	5,859,693
5. Actuarial value of assets at December 31, 2013	6,273,515
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	413,822
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$445,179**

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	**($35,102)**
2. Expected increase	10,109
3. Liability (gain)/loss	(31,357)
4. Asset (gain)/loss	(413,822)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($470,172)**

[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	$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	20,699	177,812	11.64%	26,161	233,319	11.21%
Total	**$20,699**	**$177,812**	**11.64%**	**$26,161**	**$233,319**	**11.21%**

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	($470,172)	($35,102)
2. Next year's Tier 1/Tier 2 UAL payment	(34,031)	(2,541)
3. Combined valuation payroll	447,857	427,714
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(7.60%)	(0.59%)

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	11.64%	11.21%
b. Tier 1/Tier 2 UAL rate	(7.60%)	(0.59%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	4.19%	10.75%

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	8.75%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	8.75%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.75%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	108%
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%)*	5.75%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.75%
7. July 1, 2015 total pension rate, before adjustment	4.19%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	1.56%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(7.60%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(6.04%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	5.75%
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	11.64%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.64%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	5.75%

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	11.64%	11.21%
b. Tier 1/Tier 2 UAL rate	(6.04%)	(0.59%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	5.75%	10.75%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	177,812	0	177,812
Tier 1/Tier 2 valuation payroll	177,812	0	177,812
OPSRP valuation payroll	270,045	0	270,045
Combined valuation payroll	**$447,857**	**$0**	**$447,857**

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	4	9	13	0	5	6	11
Police & Fire	0	0	0	0	0	0	0	0
Total	0	4	9	13	0	5	6	11
Active Members with previous service segments with the employer								
General Service	2	1	N/A	3	1	1	N/A	2
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	2	1	N/A	3	1	1	N/A	2
Dormant Members								
General Service	9	5	0	14	12	4	0	16
Police & Fire	0	0	0	0	0	0	0	0
Total	9	5	0	14	12	4	0	16
Retired Members and Beneficiaries								
General Service	29	2	2	33	28	2	1	31
Police & Fire	0	0	0	0	0	0	0	0
Total	29	2	2	33	28	2	1	31
Grand Total Number of Members	**40**	**12**	**11**	**63**	**41**	**12**	**7**	**60**

[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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49										
50-54			1	1						2
55-59				1						1
60-64			1							1
65-69										
70-74										
75+										
Total	0	0	2	2	0	0	0	0	0	4

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39	1	797
40-44		
45-49	3	3,137
50-54	2	857
55-59	3	984
60-64	2	1,223
65-69	2	121
70-74	1	10
75+		
Total	14	1,255

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	5,122
60-64	8	1,143
65-69	4	134
70-74	7	636
75-79	7	674
80-84	4	154
85-89		
90-94		
95-99		
100+		
Total	31	793

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Port of Hood River/2788
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.

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
Port of Hood River/2788

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Port of Hood River -- #2788

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Port of Hood River 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 Port of Hood River.

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 Port of Hood River

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.06%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.56%	0.56%	0.56%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.23%**	**8.50%**	**12.61%**
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	**12.76%**	**8.95%**	**13.06%**

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 98%.

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	11.62%	11.62%
Minimum July 1, 2017 Rate	8.62%	5.62%
Maximum July 1, 2017 Rate	14.62%	17.62%

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	$1,428,983	$1,568,804	$139,821	91%	$787,078	18%
12/31/2009	1,642,037	1,682,449	40,412	98%	825,736	5%
12/31/2010	1,847,219	1,892,645	45,426	98%	874,376	5%
12/31/2011	1,776,221	1,927,241	151,020	92%	898,223	17%
12/31/2012	2,009,040	2,223,288	214,248	90%	1,003,206	21%
12/31/2013	2,341,088	2,399,064	57,976	98%	1,035,612	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		
		OPSRP	
	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.

Port of Hood River

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$57,976	$214,248
Allocated pooled OPSRP UAL	73,224	70,709
Side account	0	0
Net unfunded pension actuarial accrued liability	131,200	284,957
Combined valuation payroll	1,035,612	1,003,206
Net pension UAL as a percentage of payroll	13%	28%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,334	$21,048

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	$77,004	$82,780
Tier 1/Tier 2 valuation payroll	696,393	714,605
Tier 1/Tier 2 pension normal cost rate	11.06%	11.58%
Tier 1/ Tier 2 Actuarial accrued liability	$2,399,064	$2,223,288
Actuarial asset value	2,341,088	2,009,040
Tier 1/Tier 2 Unfunded actuarial accrued liability	57,976	214,248
Tier 1/ Tier 2 Funded status	98%	90%
Combined valuation payroll	$1,035,612	$1,003,206
Tier 1/Tier 2 UAL as a percentage of payroll	6%	21%
Tier 1/Tier 2 UAL rate	0.56%	0.13%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	15	16
Tier 1/Tier 2 dormant members	5	5
Tier 1/Tier 2 retirees and beneficiaries	9	9

[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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	1,035,612	1,003,206
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]	$388,864	$345,469
2. Employer reserves	1,583,796	1,304,845
3. Benefits in force reserve	368,428	358,727
4. Total market value of assets ***(1. + 2. + 3.)***	**$2,341,088**	**$2,009,040**

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	$2,009,040
2.	Regular employer contributions	66,241
3.	Benefit payments and expense	(57,034)
4.	Adjustments[2]	18,519
5.	Interest credited	304,321
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$2,341,088**

[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	26,927	33,339
Tier 2 Police & Fire	0	0
Tier 2 General Service	50,077	49,441
Total	**$77,004**	**$82,780**

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	$77,004	$77,004	$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	892,006	827,806
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	747,805	638,931
▪ **Total Active Members**	**$1,639,811**	**$1,466,737**
Dormant Members	165,360	152,047
Retired Members and Beneficiaries	593,893	604,504
Total Actuarial Accrued Liability	**$2,399,064**	**$2,223,288**

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	$2,399,064	$2,399,064	$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	$2,399,064	$2,223,288
2. Actuarial value of assets	2,341,088	2,009,040
3. Unfunded accrued liability *(1. – 2.)*	57,976	214,248
4. Funded percentage *(2. ÷ 1.)*	98%	90%
5. Combined valuation payroll	$1,035,612	$1,003,206
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	6%	21%

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	$57,976	$4,196
Total				**$57,976**	**$4,196**

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	$2,223,288
b. Normal cost at December 31, 2012	82,780
c. Benefit payments during 2013	(56,582)
d. Interest at 7.75% to December 31, 2013	176,528
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	2,426,014
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.)*	2,426,014
2. Actuarial accrued liability at December 31, 2013	2,399,064
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	26,950
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,009,040
b. Contributions for 2013[1]	66,241
c. Benefit payments and expenses during 2013	(57,034)
d. Interest at 7.75% to December 31, 2013	156,057
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	2,174,305
5. Actuarial value of assets at December 31, 2013	2,341,088
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	166,783
7. Total actuarial gain/(loss) *(3. + 6.)*	**$193,733**

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	**$214,248**
2. Expected increase	37,461
3. Liability (gain)/loss	(26,950)
4. Asset (gain)/loss	(166,783)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$57,976**

[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	26,927	242,228	11.12%	33,339	276,517	12.06%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	50,077	454,165	11.03%	49,441	438,088	11.29%
Total	**$77,004**	**$696,393**	**11.06%**	**$82,780**	**$714,605**	**11.58%**

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	$57,976	$214,248
2. Next year's Tier 1/Tier 2 UAL payment	4,196	15,507
3. Combined valuation payroll	1,035,612	1,003,206
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.41%	1.55%

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	11.06%	11.58%
b. Tier 1/Tier 2 UAL rate	0.41%	1.55%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	11.62%	13.26%

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	98%
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	11.62%
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	0.41%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.41%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.62%
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	11.06%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.06%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	11.62%

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	11.06%	11.58%
b. Tier 1/Tier 2 UAL rate	0.41%	0.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	11.62%	11.71%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$242,228	$0	$242,228
Tier 2	454,165	0	454,165
Tier 1/Tier 2 valuation payroll	696,393	0	696,393
OPSRP valuation payroll	339,219	0	339,219
Combined valuation payroll	**$1,035,612**	**$0**	**$1,035,612**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	4	11	11	26	5	11	9	25
Police & Fire	0	0	0	0	0	0	0	0
Total	4	11	11	26	5	11	9	25
Active Members with previous service segments with the employer								
General Service	2	1	N/A	3	0	1	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	2	1	N/A	3	0	1	N/A	1
Dormant Members								
General Service	2	3	0	5	2	3	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	2	3	0	5	2	3	0	5
Retired Members and Beneficiaries								
General Service	8	1	0	9	8	1	0	9
Police & Fire	0	0	0	0	0	0	0	0
Total	8	1	0	9	8	1	0	9
Grand Total Number of Members	**16**	**16**	**11**	**43**	**15**	**16**	**9**	**40**

[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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<20										
20-24										
25-29										
30-34										
35-39				1						**1**
40-44										
45-49			3							**3**
50-54										
55-59		1	1	1	1					**4**
60-64		1	3	1						**5**
65-69										
70-74				1						**1**
75+			1							**1**
Total	**0**	**2**	**8**	**4**	**1**	**0**	**0**	**0**	**0**	**15**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54	2	797
55-59	1	25
60-64		
65-69	1	46
70-74		
75+	1	215
Total	5	376

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	1,051
60-64	2	583
65-69	3	392
70-74	1	90
75-79	2	402
80-84		
85-89		
90-94		
95-99		
100+		
Total	9	476

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Port of St Helens/2570
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.

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
Port of St Helens/2570

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Port of St Helens -- #2570

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Port of St Helens 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 Port of St Helens.

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 Port of St Helens

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.90%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(1.94%)	(1.94%)	(1.94%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.57%**	**6.00%**	**10.11%**
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	**11.10%**	**6.45%**	**10.56%**

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 112%.

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	9.96%	9.96%
Minimum July 1, 2017 Rate	6.96%	3.96%
Maximum July 1, 2017 Rate	12.96%	15.96%

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	$1,437,598	$1,786,853	$349,255	80%	$529,788	66%
12/31/2009	1,605,145	1,723,418	118,273	93%	482,355	25%
12/31/2010	1,687,521	1,734,253	46,732	97%	557,265	8%
12/31/2011	1,659,759	1,763,906	104,147	94%	703,056	15%
12/31/2012	1,808,628	1,712,608	(96,020)	106%	737,966	(13%)
12/31/2013	1,971,697	1,758,059	(213,638)	112%	740,374	(29%)

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		
		OPSRP	
	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.

Port of St Helens

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($213,638)	($96,020)
Allocated pooled OPSRP UAL	52,349	52,014
Side account	0	0
Net unfunded pension actuarial accrued liability	(161,289)	(44,006)
Combined valuation payroll	740,374	737,966
Net pension UAL as a percentage of payroll	(22%)	(6%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,248	$15,483

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	$22,738	$21,584
Tier 1/Tier 2 valuation payroll	191,118	183,972
Tier 1/Tier 2 pension normal cost rate	11.90%	11.73%
Tier 1/ Tier 2 Actuarial accrued liability	$1,758,059	$1,712,608
Actuarial asset value	1,971,697	1,808,628
Tier 1/Tier 2 Unfunded actuarial accrued liability	(213,638)	(96,020)
Tier 1/ Tier 2 Funded status	112%	106%
Combined valuation payroll	$740,374	$737,966
Tier 1/Tier 2 UAL as a percentage of payroll	(29%)	(13%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(1.94%)	(0.87%)
Tier 1/Tier 2 active members [1]	2	2
Tier 1/Tier 2 dormant members	4	5
Tier 1/Tier 2 retirees and beneficiaries	6	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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	740,374	737,966
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]	$115,935	$151,539
2. Employer reserves	1,073,304	971,332
3. Benefits in force reserve	782,458	685,757
4. Total market value of assets *(1. + 2. + 3.)*	**$1,971,697**	**$1,808,628**

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	$1,808,628
2.	Regular employer contributions	14,909
3.	Benefit payments and expense	(121,128)
4.	Adjustments[2]	(990)
5.	Interest credited	270,279
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,971,697**

[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	13,438	12,610
Tier 2 Police & Fire	0	0
Tier 2 General Service	9,300	8,974
Total	**$22,738**	**$21,584**

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	$22,738	$22,738	$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	61,754	46,194
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	220,191	201,405
▪ **Total Active Members**	**$281,945**	**$247,599**
Dormant Members	214,818	309,413
Retired Members and Beneficiaries	1,261,296	1,155,596
Total Actuarial Accrued Liability	**$1,758,059**	**$1,712,608**

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	$1,758,059	$1,758,059	$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	$1,758,059	$1,712,608
2. Actuarial value of assets	1,971,697	1,808,628
3. Unfunded accrued liability *(1. – 2.)*	(213,638)	(96,020)
4. Funded percentage *(2. ÷ 1.)*	112%	106%
5. Combined valuation payroll	$740,374	$737,966
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(29%)	(13%)

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	($213,638)	($15,463)
Total				**($213,638)**	**($15,463)**

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	$1,712,608
b. Normal cost at December 31, 2012	21,584
c. Benefit payments during 2013	(120,167)
d. Interest at 7.75% to December 31, 2013	129,743
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,743,768
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.)*	1,743,768
2. Actuarial accrued liability at December 31, 2013	1,758,059
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(14,291)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,808,628
b. Contributions for 2013[1]	14,909
c. Benefit payments and expenses during 2013	(121,128)
d. Interest at 7.75% to December 31, 2013	136,053
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,838,461
5. Actuarial value of assets at December 31, 2013	1,971,697
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	133,236
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$118,945**

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	**($96,020)**
2. Expected increase	1,327
3. Liability (gain)/loss	14,291
4. Asset (gain)/loss	(133,236)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($213,638)**

[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	13,438	87,119	15.42%	12,610	83,189	15.16%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	9,300	103,999	8.94%	8,974	100,783	8.90%
Total	**$22,738**	**$191,118**	**11.90%**	**$21,584**	**$183,972**	**11.73%**

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	($213,638)	($96,020)
2. Next year's Tier 1/Tier 2 UAL payment	(15,463)	(6,950)
3. Combined valuation payroll	740,374	737,966
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(2.09%)	(0.94%)

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	11.90%	11.73%
b. Tier 1/Tier 2 UAL rate	(2.09%)	(0.94%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.96%	10.92%

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	7.86%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	7.86%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.57%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	112%
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%)*	4.86%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	10.86%
7. July 1, 2015 total pension rate, before adjustment	9.96%
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	(2.09%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(2.09%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.96%
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	11.90%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.90%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.96%

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	11.90%	11.73%
b. Tier 1/Tier 2 UAL rate	(2.09%)	(1.00%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	9.96%	10.86%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$87,119	$0	$87,119
Tier 2	103,999	0	103,999
Tier 1/Tier 2 valuation payroll	191,118	0	191,118
OPSRP valuation payroll	549,256	0	549,256
Combined valuation payroll	**$740,374**	**$0**	**$740,374**

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	1	9	11	1	1	9	11
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	9	11	1	1	9	11
Active Members with previous service segments with the employer								
General Service	0	1	N/A	1	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	1	N/A	1	0	0	N/A	0
Dormant Members								
General Service	1	3	1	5	2	3	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	1	3	1	5	2	3	0	5
Retired Members and Beneficiaries								
General Service	5	1	0	6	5	1	0	6
Police & Fire	0	0	0	0	0	0	0	0
Total	5	1	0	6	5	1	0	6
Grand Total Number of Members	**7**	**6**	**10**	**23**	**8**	**5**	**9**	**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 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39										
40-44										
45-49			1							**1**
50-54						1				**1**
55-59										
60-64										
65-69										
70-74										
75+										
Total	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**2**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54	1	601
55-59	3	483
60-64		
65-69		
70-74		
75+		
Total	4	513

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	775
60-64	1	5,533
65-69		
70-74	1	1,680
75-79		
80-84	2	447
85-89	1	907
90-94		
95-99		
100+		
Total	6	1,631

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Port of Umatilla/2581
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.

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.

Milliman

September 2014
Port of Umatilla/2581

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Port of Umatilla -- #2581

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Port of Umatilla 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 Port of Umatilla.

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 Port of Umatilla

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.00%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	1.96%	1.96%	1.96%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**17.57%**	**9.90%**	**14.01%**
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	**18.10%**	**10.35%**	**14.46%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

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 88%.

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	16.96%	16.96%
Minimum July 1, 2017 Rate	13.57%	10.18%
Maximum July 1, 2017 Rate	20.35%	23.74%

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	$1,048,691	$1,336,803	$288,112	78%	$134,087	215%
12/31/2009	1,188,372	1,391,298	202,926	85%	138,238	147%
12/31/2010	1,286,852	1,460,214	173,362	88%	142,337	122%
12/31/2011	1,302,983	1,727,626	424,643	75%	209,068	203%
12/31/2012	1,466,216	1,609,488	143,272	91%	155,036	92%
12/31/2013	1,478,945	1,673,028	194,083	88%	152,543	127%

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		
		OPSRP	
	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.

Port of Umatilla

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$194,083	$143,272
Allocated pooled OPSRP UAL	10,786	10,927
Side account	0	0
Net unfunded pension actuarial accrued liability	204,869	154,199
Combined valuation payroll	152,543	155,036
Net pension UAL as a percentage of payroll	134%	99%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,111	$3,253

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	$22,875	$22,274
Tier 1/Tier 2 valuation payroll	152,543	155,036
Tier 1/Tier 2 pension normal cost rate	15.00%	14.37%
Tier 1/ Tier 2 Actuarial accrued liability	$1,673,028	$1,609,488
Actuarial asset value	1,478,945	1,466,216
Tier 1/Tier 2 Unfunded actuarial accrued liability	194,083	143,272
Tier 1/ Tier 2 Funded status	88%	91%
Combined valuation payroll	$152,543	$155,036
Tier 1/Tier 2 UAL as a percentage of payroll	127%	92%
Tier 1/Tier 2 UAL rate	1.96%	2.59%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	0	1
Tier 1/Tier 2 retirees and beneficiaries	5	4

[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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	152,543	155,036
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]	$154,427	$364,881
2. Employer reserves	600,731	729,053
3. Benefits in force reserve	723,787	372,282
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,478,945**	**$1,466,216**

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	$1,466,216
2. Regular employer contributions	21,375
3. Benefit payments and expense	(112,045)
4. Adjustments[2]	(91,712)
5. Interest credited	195,111
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,478,945**

[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	22,875	22,274
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$22,875**	**$22,274**

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	$22,875	$22,875	$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	506,309	476,978
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$506,309**	**$476,978**
Dormant Members	0	505,163
Retired Members and Beneficiaries	1,166,719	627,347
Total Actuarial Accrued Liability	**$1,673,028**	**$1,609,488**

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	$1,673,028	$1,673,028	$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	$1,673,028	$1,609,488
2. Actuarial value of assets	1,478,945	1,466,216
3. Unfunded accrued liability *(1. – 2.)*	194,083	143,272
4. Funded percentage *(2. ÷ 1.)*	88%	91%
5. Combined valuation payroll	$152,543	$155,036
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	127%	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	$194,083	$14,048
Total				**$194,083**	**$14,048**

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	$1,609,488
b. Normal cost at December 31, 2012	22,274
c. Benefit payments during 2013	(111,157)
d. Interest at 7.75% to December 31, 2013	122,154
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,642,759
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.)*	1,642,759
2. Actuarial accrued liability at December 31, 2013	1,673,028
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(30,269)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,466,216
b. Contributions for 2013[1]	21,375
c. Benefit payments and expenses during 2013	(112,045)
d. Interest at 7.75% to December 31, 2013	110,118
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,485,664
5. Actuarial value of assets at December 31, 2013	1,478,945
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	(6,719)
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($36,988)**

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	**$143,272**
2. Expected increase	13,823
3. Liability (gain)/loss	30,269
4. Asset (gain)/loss	6,719
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$194,083**

[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	22,875	152,543	15.00%	22,274	155,036	14.37%
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	**$22,875**	**$152,543**	**15.00%**	**$22,274**	**$155,036**	**14.37%**

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	$194,083	$143,272
2. Next year's Tier 1/Tier 2 UAL payment	14,048	10,370
3. Combined valuation payroll	152,543	155,036
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	9.21%	6.69%

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	15.00%	14.37%
b. Tier 1/Tier 2 UAL rate	9.21%	6.69%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	24.36%	21.19%

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	13.96%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.96%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.79%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	88%
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%)*	10.96%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	16.96%
7. July 1, 2015 total pension rate, before adjustment	24.36%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(7.40%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	9.21%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	1.81%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	16.96%
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	15.00%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.00%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	16.96%

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	15.00%	14.37%
b. Tier 1/Tier 2 UAL rate	1.81%	2.46%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	16.96%	16.96%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$152,543	$0	$152,543
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	152,543	0	152,543
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$152,543**	**$0**	**$152,543**

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	1	0	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1
Retired Members and Beneficiaries								
General Service	5	0	0	5	4	0	0	4
Police & Fire	0	0	0	0	0	0	0	0
Total	5	0	0	5	4	0	0	4
Grand Total Number of Members	**6**	**0**	**0**	**6**	**6**	**0**	**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

	Years of Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
<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**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<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		

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	3,396
60-64	1	2,342
65-69		
70-74	1	1,823
75-79		
80-84	1	171
85-89	1	77
90-94		
95-99		
100+		
Total	5	1,562

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Redmond Area Park & Recreation District/2689
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.

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.

Milliman

September 2014
Redmond Area Park & Recreation District/2689

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Redmond Area Park & Recreation District -- #2689

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Redmond Area Park & Recreation 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 Redmond Area Park & Recreation 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 Redmond Area Park & Recreation District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.59%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(2.63%)	(2.63%)	(2.63%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**9.57%**	**5.31%**	**9.42%**
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	**10.10%**	**5.76%**	**9.87%**

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 121%.

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	8.96%	8.96%
Minimum July 1, 2017 Rate	5.96%	2.96%
Maximum July 1, 2017 Rate	11.96%	14.96%

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	$958,195	$916,844	($41,351)	105%	$260,448	(16%)
12/31/2009	1,072,442	981,667	(90,775)	109%	371,612	(24%)
12/31/2010	1,158,697	1,021,030	(137,667)	113%	522,965	(26%)
12/31/2011	1,131,545	1,064,956	(66,589)	106%	590,808	(11%)
12/31/2012	1,271,322	1,134,298	(137,024)	112%	766,663	(18%)
12/31/2013	1,428,866	1,179,561	(249,305)	121%	719,810	(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		
		OPSRP	
	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.

Redmond Area Park & Recreation District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($249,305)	($137,024)
Allocated pooled OPSRP UAL	50,895	54,037
Side account	0	0
Net unfunded pension actuarial accrued liability	(198,410)	(82,987)
Combined valuation payroll	719,810	766,663
Net pension UAL as a percentage of payroll	(28%)	(11%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,963	$16,085

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	$25,475	$25,756
Tier 1/Tier 2 valuation payroll	219,891	230,392
Tier 1/Tier 2 pension normal cost rate	11.59%	11.18%
Tier 1/ Tier 2 Actuarial accrued liability	$1,179,561	$1,134,298
Actuarial asset value	1,428,866	1,271,322
Tier 1/Tier 2 Unfunded actuarial accrued liability	(249,305)	(137,024)
Tier 1/ Tier 2 Funded status	121%	112%
Combined valuation payroll	$719,810	$766,663
Tier 1/Tier 2 UAL as a percentage of payroll	(35%)	(18%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(2.63%)	(2.22%)
Tier 1/Tier 2 active members [1]	6	6
Tier 1/Tier 2 dormant members	5	6
Tier 1/Tier 2 retirees and beneficiaries	8	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	
RHIA	December 31, 2013	December 31, 2012
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	719,810	766,663
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]	$307,555	$279,713
2. Employer reserves	896,763	776,084
3. Benefits in force reserve	224,547	215,525
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,428,866**	**$1,271,322**

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	$1,271,322
2.	Regular employer contributions	345
3.	Benefit payments and expense	(34,761)
4.	Adjustments [2]	14,699
5.	Interest credited	177,260
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,428,866**

[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	12,527	12,276
Tier 2 Police & Fire	0	0
Tier 2 General Service	12,948	13,480
Total	**$25,475**	**$25,756**

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	$25,475	$25,475	$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	480,055	449,498
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	242,526	231,076
▪ **Total Active Members**	**$722,581**	**$680,574**
Dormant Members	95,017	90,535
Retired Members and Beneficiaries	361,963	363,189
Total Actuarial Accrued Liability	**$1,179,561**	**$1,134,298**

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	$1,179,561	$1,179,561	$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	$1,179,561	$1,134,298
2. Actuarial value of assets	1,428,866	1,271,322
3. Unfunded accrued liability *(1. – 2.)*	(249,305)	(137,024)
4. Funded percentage *(2. ÷ 1.)*	121%	112%
5. Combined valuation payroll	$719,810	$766,663
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(35%)	(18%)

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	($249,305)	($18,045)
Total				**($249,305)**	**($18,045)**

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	$1,134,298
b. Normal cost at December 31, 2012	25,756
c. Benefit payments during 2013	(34,485)
d. Interest at 7.75% to December 31, 2013	88,568
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,214,137
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.)*	1,214,137
2. Actuarial accrued liability at December 31, 2013	1,179,561
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	34,576
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,271,322
b. Contributions for 2013[1]	345
c. Benefit payments and expenses during 2013	(34,761)
d. Interest at 7.75% to December 31, 2013	97,194
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,334,100
5. Actuarial value of assets at December 31, 2013	1,428,866
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	94,765
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$129,341**

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	**($137,024)**
2. Expected increase	17,060
3. Liability (gain)/loss	(34,576)
4. Asset (gain)/loss	(94,765)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($249,305)**

[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	12,527	94,266	13.29%	12,276	94,295	13.02%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	12,948	125,625	10.31%	13,480	136,097	9.90%
Total	**$25,475**	**$219,891**	**11.59%**	**$25,756**	**$230,392**	**11.18%**

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	($249,305)	($137,024)
2. Next year's Tier 1/Tier 2 UAL payment	(18,045)	(9,918)
3. Combined valuation payroll	719,810	766,663
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(2.51%)	(1.29%)

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	11.59%	11.18%
b. Tier 1/Tier 2 UAL rate	(2.51%)	(1.29%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.23%	10.02%

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	5.96%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	5.96%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.19%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	121%
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%)*	2.96%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	8.96%
7. July 1, 2015 total pension rate, before adjustment	9.23%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.27%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(2.51%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(2.78%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.96%
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	11.59%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.59%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	8.96%

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	11.59%	11.18%
b. Tier 1/Tier 2 UAL rate	(2.78%)	(2.35%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	8.96%	8.96%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$94,266	$0	$94,266
Tier 2	125,625	0	125,625
Tier 1/Tier 2 valuation payroll	219,891	0	219,891
OPSRP valuation payroll	499,919	0	499,919
Combined valuation payroll	**$719,810**	**$0**	**$719,810**

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	4	28	34	2	4	31	37
Police & Fire	0	0	0	0	0	0	0	0
Total	2	4	28	34	2	4	31	37
Active Members with previous service segments with the employer								
General Service	8	2	N/A	10	7	2	N/A	9
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	8	2	N/A	10	7	2	N/A	9
Dormant Members								
General Service	1	4	0	5	2	4	0	6
Police & Fire	0	0	0	0	0	0	0	0
Total	1	4	0	5	2	4	0	6
Retired Members and Beneficiaries								
General Service	8	0	0	8	8	0	0	8
Police & Fire	0	0	0	0	0	0	0	0
Total	8	0	0	8	8	0	0	8
Grand Total Number of Members	**19**	**10**	**28**	**57**	**19**	**10**	**31**	**60**

[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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34										
35-39					1					**1**
40-44			2							**2**
45-49										
50-54			1							**1**
55-59			1							**1**
60-64				1						**1**
65-69										
70-74										
75+										
Total	**0**	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**6**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39	2	56
40-44		
45-49	1	954
50-54	1	244
55-59		
60-64		
65-69	1	936
70-74		
75+		
Total	5	449

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	4	434
65-69	1	256
70-74	1	311
75-79		
80-84		
85-89	2	195
90-94		
95-99		
100+		
Total	8	337

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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September 2014

Rockwood Water PUD/2672
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.

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.

Milliman

September 2014
Rockwood Water PUD/2672

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

ACTUARIAL VALUATION REPORT
DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Rockwood Water PUD -- #2672

September 2014

Secondary Employers

2554 Hazelwood Water District

CONTENTS

Executive Summary

Milliman has prepared this report for Rockwood Water PUD 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 Rockwood Water PUD.

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 Rockwood Water PUD

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.37%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	2.25%	2.25%	2.25%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**15.23%**	**10.19%**	**14.30%**
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	**15.76%**	**10.64%**	**14.75%**

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 89%.

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	14.62%	14.62%
Minimum July 1, 2017 Rate	11.62%	8.62%
Maximum July 1, 2017 Rate	17.62%	20.62%

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	$5,852,445	$7,877,547	$2,025,102	74%	$1,316,034	154%
12/31/2009	6,656,442	8,255,899	1,599,457	81%	1,424,777	112%
12/31/2010	7,086,107	8,405,996	1,319,889	84%	1,403,320	94%
12/31/2011	6,767,732	8,570,288	1,802,556	79%	1,285,852	140%
12/31/2012	7,031,202	8,782,146	1,750,944	80%	1,153,789	152%
12/31/2013	7,741,377	8,677,555	936,178	89%	1,240,344	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		
		OPSRP	
	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.

Rockwood Water PUD

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$936,178	$1,750,944
Allocated pooled OPSRP UAL	87,700	81,322
Side account	0	0
Net unfunded pension actuarial accrued liability	1,023,878	1,832,266
Combined valuation payroll	1,240,344	1,153,789
Net pension UAL as a percentage of payroll	83%	159%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,168	$24,207

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	$77,496	$65,600
Tier 1/Tier 2 valuation payroll	626,469	626,083
Tier 1/Tier 2 pension normal cost rate	12.37%	10.48%
Tier 1/ Tier 2 Actuarial accrued liability	$8,677,555	$8,782,146
Actuarial asset value	7,741,377	7,031,202
Tier 1/Tier 2 Unfunded actuarial accrued liability	936,178	1,750,944
Tier 1/ Tier 2 Funded status	89%	80%
Combined valuation payroll	$1,240,344	$1,153,789
Tier 1/Tier 2 UAL as a percentage of payroll	75%	152%
Tier 1/Tier 2 UAL rate	2.25%	4.14%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	9	9
Tier 1/Tier 2 dormant members	7	8
Tier 1/Tier 2 retirees and beneficiaries	23	23

[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	
RHIA	**December 31, 2013**	**December 31, 2012**
Normal cost	$4.0	$4.4
Tier 1 / Tier 2 valuation payroll	5,073.7	5,341.7
Normal cost rate	0.08%	0.08%
Actuarial accrued liability	$473.6	$471.8
Actuarial asset value	353.5	291.6
Unfunded actuarial accrued liability	120.0	180.2
Funded status	75%	62%
Combined valuation payroll	$8,671.8	$8,590.9
UAL as a percentage of payroll	1%	2%
UAL rate	0.45%	0.48%

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
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	1,240,344	1,153,789
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]	$1,220,442	$1,119,774
2. Employer reserves	2,992,501	2,505,544
3. Benefits in force reserve	3,528,433	3,405,884
4. Total market value of assets *(1. + 2. + 3.)*	**$7,741,377**	**$7,031,202**

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	$7,031,202
2.	Regular employer contributions	84,309
3.	Benefit payments and expense	(546,216)
4.	Adjustments [2]	195,232
5.	Interest credited	976,849
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$7,741,377**

[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	31,972	15,663
Tier 2 Police & Fire	0	0
Tier 2 General Service	45,524	49,937
Total	**$77,496**	**$65,600**

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	$77,496	$77,496	$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	1,146,416	1,075,142
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	895,874	873,560
▪ **Total Active Members**	**$2,042,290**	**$1,948,702**
Dormant Members	947,555	1,094,058
Retired Members and Beneficiaries	5,687,710	5,739,386
Total Actuarial Accrued Liability	**$8,677,555**	**$8,782,146**

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	$8,677,555	$8,677,555	$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	$8,677,555	$8,782,146
2. Actuarial value of assets	7,741,377	7,031,202
3. Unfunded accrued liability *(1. – 2.)*	936,178	1,750,944
4. Funded percentage *(2. ÷ 1.)*	89%	80%
5. Combined valuation payroll	$1,240,344	$1,153,789
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	75%	152%

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	$936,178	$67,760
Total				**$936,178**	**$67,760**

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	$8,782,146
b. Normal cost at December 31, 2012	65,600
c. Benefit payments during 2013	(541,884)
d. Interest at 7.75% to December 31, 2013	664,702
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	8,970,564
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.)*	8,970,564
2. Actuarial accrued liability at December 31, 2013	8,677,555
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	293,009
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	7,031,202
b. Contributions for 2013[1]	84,309
c. Benefit payments and expenses during 2013	(546,216)
d. Interest at 7.75% to December 31, 2013	527,019
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	7,096,314
5. Actuarial value of assets at December 31, 2013	7,741,377
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	645,062
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$938,071**

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	**$1,750,944**
2. Expected increase	123,305
3. Liability (gain)/loss	(293,009)
4. Asset (gain)/loss	(645,062)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$936,178**

[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	31,972	139,673	22.89%	15,663	81,489	19.22%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	45,524	486,796	9.35%	49,937	544,594	9.17%
Total	**$77,496**	**$626,469**	**12.37%**	**$65,600**	**$626,083**	**10.48%**

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	$936,178	$1,750,944
2. Next year's Tier 1/Tier 2 UAL payment	67,760	126,733
3. Combined valuation payroll	1,240,344	1,153,789
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	5.46%	10.98%

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	12.37%	10.48%
b. Tier 1/Tier 2 UAL rate	5.46%	10.98%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	17.98%	21.59%

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	11.62%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	11.62%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.32%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	89%
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%)*	8.62%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	14.62%
7. July 1, 2015 total pension rate, before adjustment	17.98%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(3.36%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	5.46%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	2.10%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	14.62%
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	12.37%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.37%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	14.62%

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	12.37%	10.48%
b. Tier 1/Tier 2 UAL rate	2.10%	4.01%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	14.62%	14.62%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$139,673	$0	$139,673
Tier 2	486,796	0	486,796
Tier 1/Tier 2 valuation payroll	626,469	0	626,469
OPSRP valuation payroll	613,875	0	613,875
Combined valuation payroll	**$1,240,344**	**$0**	**$1,240,344**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	3	6	11	20	2	7	9	18
Police & Fire	0	0	0	0	0	0	0	0
Total	3	6	11	20	2	7	9	18
Active Members with previous service segments with the employer								
General Service	3	2	N/A	5	1	0	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	3	2	N/A	5	1	0	N/A	1
Dormant Members								
General Service	6	1	0	7	7	1	0	8
Police & Fire	0	0	0	0	0	0	0	0
Total	6	1	0	7	7	1	0	8
Retired Members and Beneficiaries								
General Service	22	1	0	23	21	2	0	23
Police & Fire	0	0	0	0	0	0	0	0
Total	22	1	0	23	21	2	0	23
Grand Total Number of Members	**34**	**10**	**11**	**55**	**31**	**10**	**9**	**50**

[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									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										
20-24										
25-29										
30-34			1							**1**
35-39			1							**1**
40-44			1	1						**2**
45-49			1	1						**2**
50-54						1				**1**
55-59				1	1					**2**
60-64										
65-69										
70-74										
75+										
Total	**0**	**0**	**4**	**3**	**1**	**1**	**0**	**0**	**0**	**9**

Distribution of Employer Tier 1/Tier 2 Members as of December 31, 2013

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49	2	1,584
50-54	2	1,227
55-59	1	2,406
60-64	1	1,195
65-69	1	0
70-74		
75+		
Total	7	1,318

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	3	1,934
60-64	6	2,458
65-69	7	1,621
70-74	1	196
75-79	2	1,672
80-84	2	1,241
85-89		
90-94	1	2,011
95-99	1	34
100+		
Total	23	1,738

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:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10 year period. 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.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 6.1% in 2014 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2012 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions since the December 31, 2012 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard governing a state or local governmental employer's accounting for pensions for fiscal years beginning after June 15, 2014.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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